



Portable Gas Monitors
04 Series
Data Logger Management Program
SW-04

Operating Manual

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1. Introduction

The operating procedures and precautions described in this operating manual apply only for use in accordance with the stipulated purposes. Riken Keiki rejects all liability in cases involving use of the program in ways not described in this manual.

This operating manual omits descriptions of basic operations like command selection and dialog box settings for Microsoft Windows 7, Windows 8, and Windows 10. If you are using Windows for the first time, read the Windows manual and familiarize yourself with basic Windows operations before proceeding.

The example screens shown in this operating manual are for Windows 10.

WARNING

The CD on which this program is provided is a CD-ROM.
Do not attempt to play this CD on a regular audio CD player.
High audio volumes may damage your ears or speakers.

CAUTION

Requires pointing device.

This software requires the use of a pointing device such as a mouse or touchpad.
It cannot be used with a keyboard alone.

1-1. Software purpose and features

This software program is designed to import data collected using the data logger function of the 04 Series into a PC for various purposes.

Importing data collected using the data logger function into a PC offers the following benefits:

- Allows collected data to be listed.
- Allows collected data details to be displayed in graph or table form for review.
- Allows graph and table data to be printed and stored as hard copies.
- Allows past data to be recorded.
- Eliminates the need to write down data on paper by hand.
- Simplifies the management of multiple devices.

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Contents

	Page
1. Introduction.....	2
1-1. Software purpose and features.....	2
2. Installing and Uninstalling.....	4
2-1. Operating environment precautions.....	4
CAUTION: Precautions regarding handling of the CD-ROM.....	4
2-2. Installing the software.....	4
2-3. Installation procedure.....	5
CAUTION: Saving past data before reinstalling.....	8
CAUTION: Installation precautions.....	8
2-4. Uninstallation procedure.....	9
3. Operating Procedures.....	11
3-1. Download screen.....	11
① Receiving data from the 04 Series.....	12
② Receiving device information data.....	13
③ Downloading data.....	14
④ Downloading all main unit data.....	15
⑤ Clearing 04 Series main unit data.....	16
⑥ Turning off power for the 04 Series main unit.....	16
⑦ Switching to automatic processing.....	17
3-2. Instrument Information screen.....	18
① Data source information.....	19
② Status information.....	19
③ Calibration history information.....	20
④ Alarm setpoints.....	20
3-3. Data screen.....	21
① Deleting data.....	22
② Viewing data details.....	22
③ Summary display area.....	23
3-4. Data View screen.....	26
① Selecting table or graph.....	27
② Sending to printer.....	28
CAUTION: Printer setup precautions.....	30
③ Saving to file.....	31
④ To view data summary at the same time.....	32
⑤ Table details.....	33
⑥ Graph details.....	34
3-5. Last Calibration screen.....	35
① Selecting display details.....	36
② Sending to printer.....	37
③ Deleting data.....	38
④ Changing password.....	39
3-6. Set screen.....	40
① Setting font and graph colors.....	41
② Changing main unit status.....	43
③ Update notification to the 04 Series main unit.....	43
4. Data Maintenance.....	44
4-1. Data storage configuration details.....	44
4-2. Backing up.....	44
5. Usage Precautions.....	45
6. Troubleshooting.....	46
7. IrDA Specifications.....	47
7-1. Infrared communication.....	47
8. File Organization.....	48
8-1. Current directory immediately after installation.....	48
8-2. Current directory during operation.....	48
9. Software Function Specifications.....	49

2. Installing and Uninstalling

2-1. Operating environment precautions

This program is compatible with Microsoft Windows 7, Microsoft Windows 8, and Microsoft Windows 10. The program is not compatible with other operating systems.

This program requires up to approximately 40 MB of free hard disk space to install. It may require additional space, depending on the number of data samples. Make sure sufficient disk space is available.

CAUTION

Precautions regarding handling of the CD-ROM
<ol style="list-style-type: none">1. CD-ROM storage Do not store in locations subject to direct sunlight or high temperatures and humidity.2. CD-ROM drive type Do not insert into slot-loading CD-ROM drives. The label on the CD-ROM may prevent the CD-ROM from ejecting properly. Load the CD-ROM into a tray-loading CD-ROM drive.

2-2. Installing the software

Insert the install CD containing this program into the CD-ROM drive of your PC. The installation screen will appear automatically after a short while.

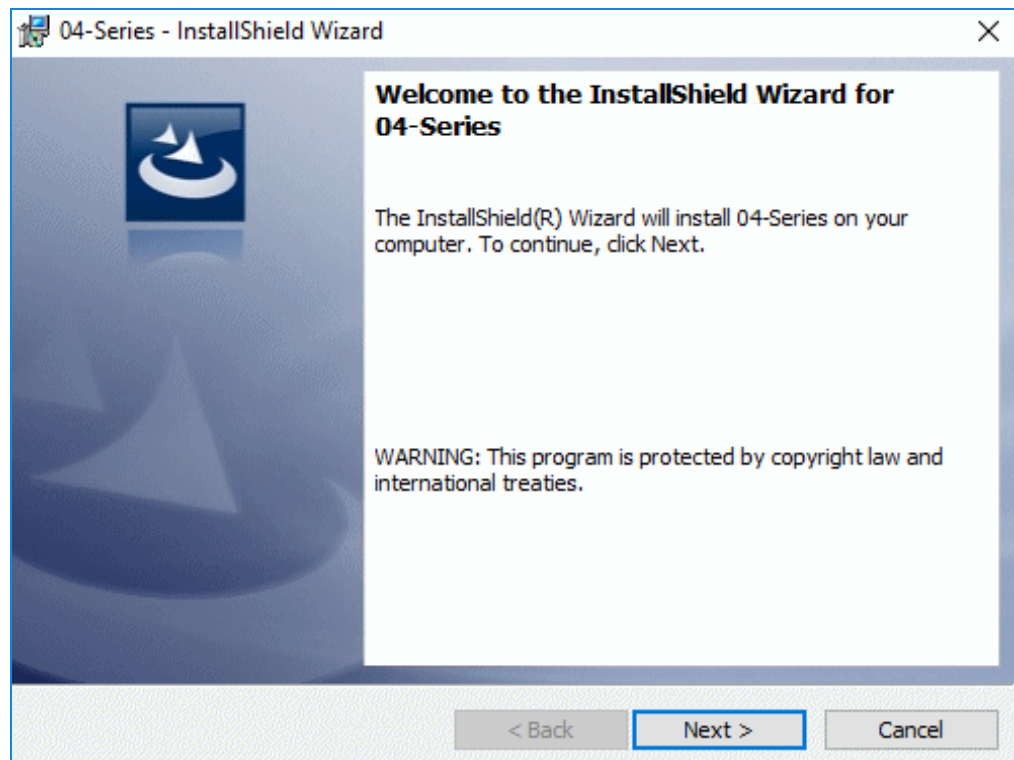
Do the following if the PC does not support automatic CD-ROM startup:

1. Open the CD-ROM drive in Explorer.
2. Double-click on the file "setup.exe".

2-3. Installation procedure

- Launch setup

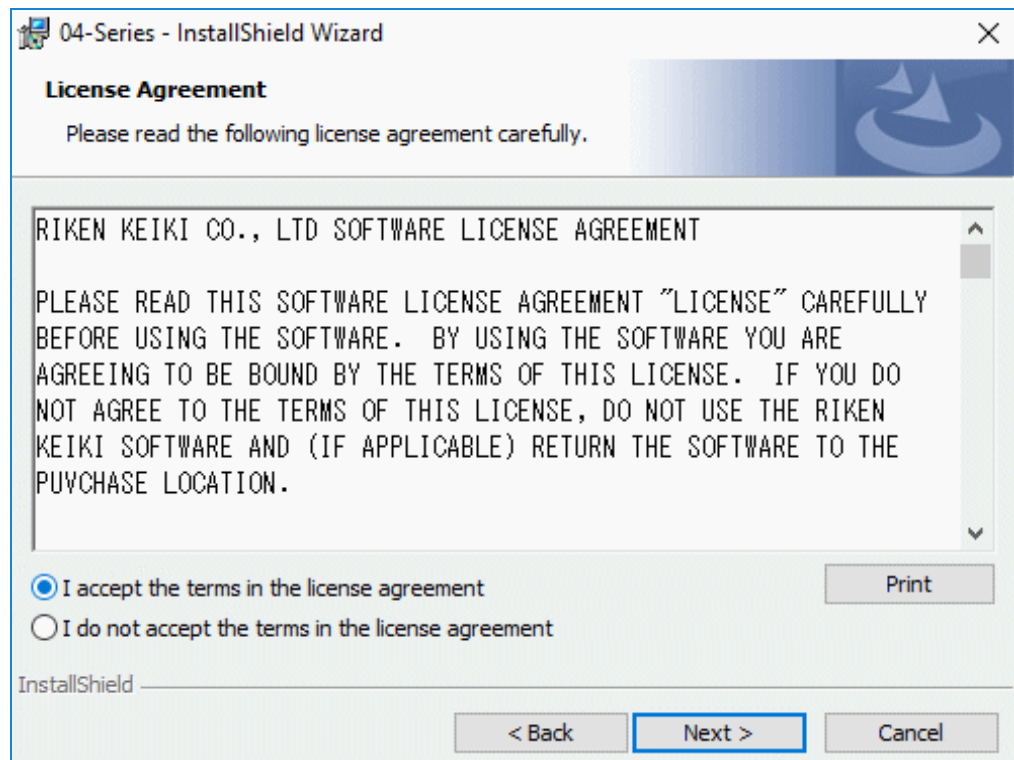
The following screen will appear after you insert the CD-ROM and double-click on setup.exe.



Click the "Next" button.

- Accept license agreement

The following screen will appear:

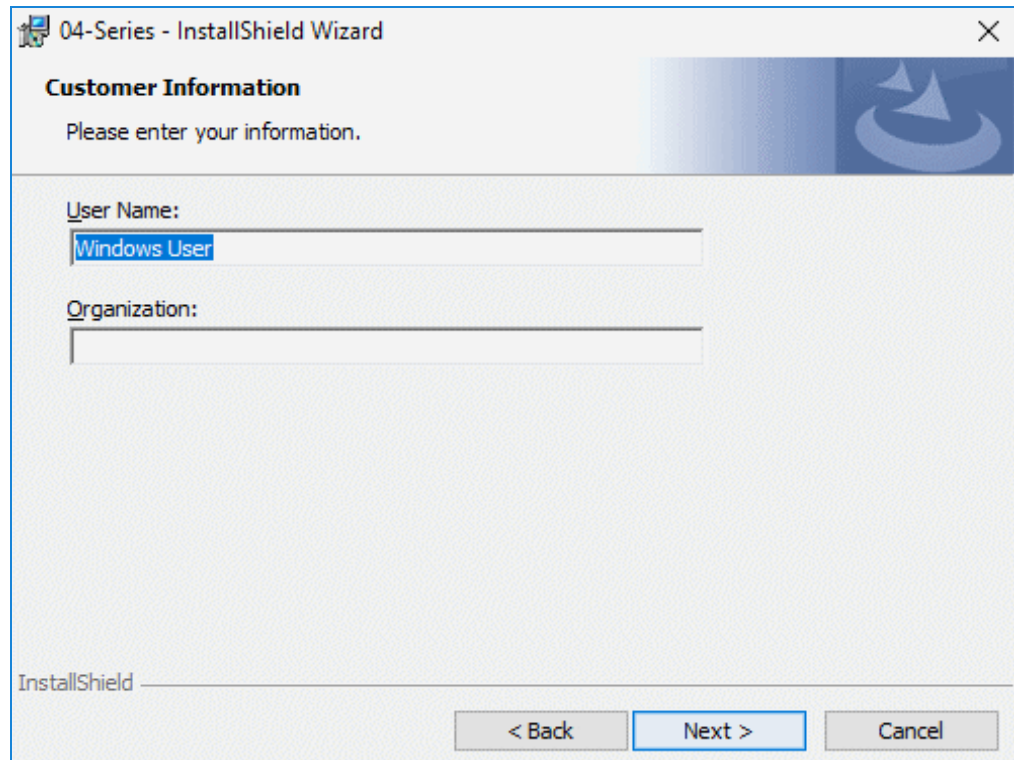


To install the software, click the "Next" button. To abort the process, click the "Cancel" button.

CAUTION: Make sure you have read and fully understand the terms of the software license agreement before installing the software.

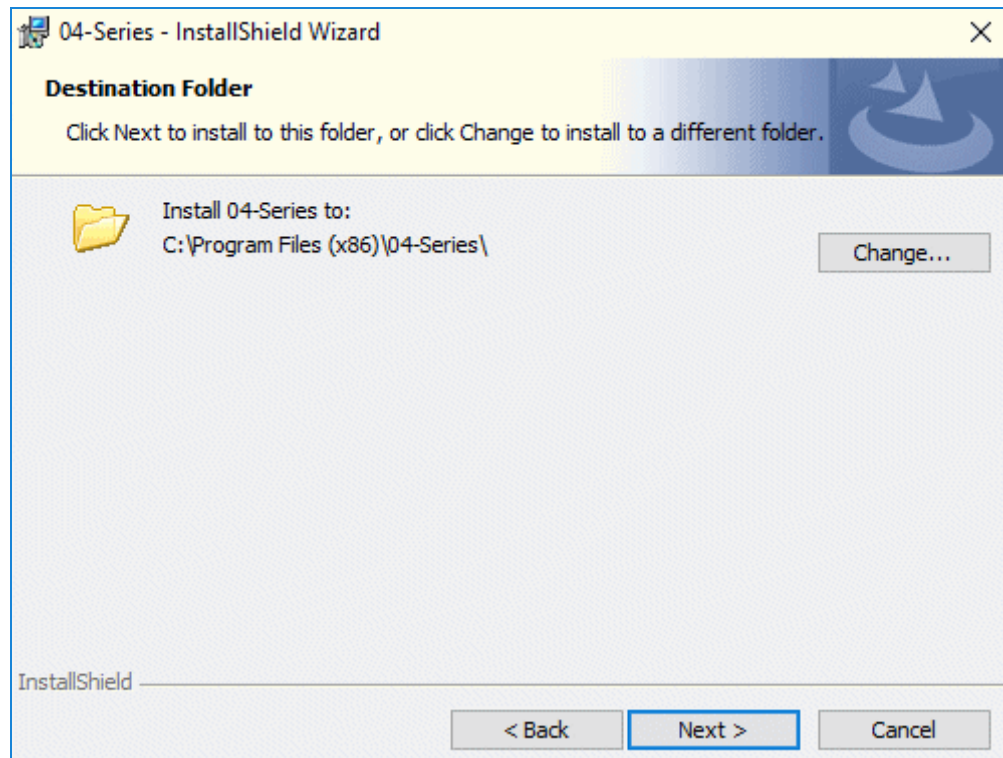
- User information

Click the “Next” button to display the following screen:



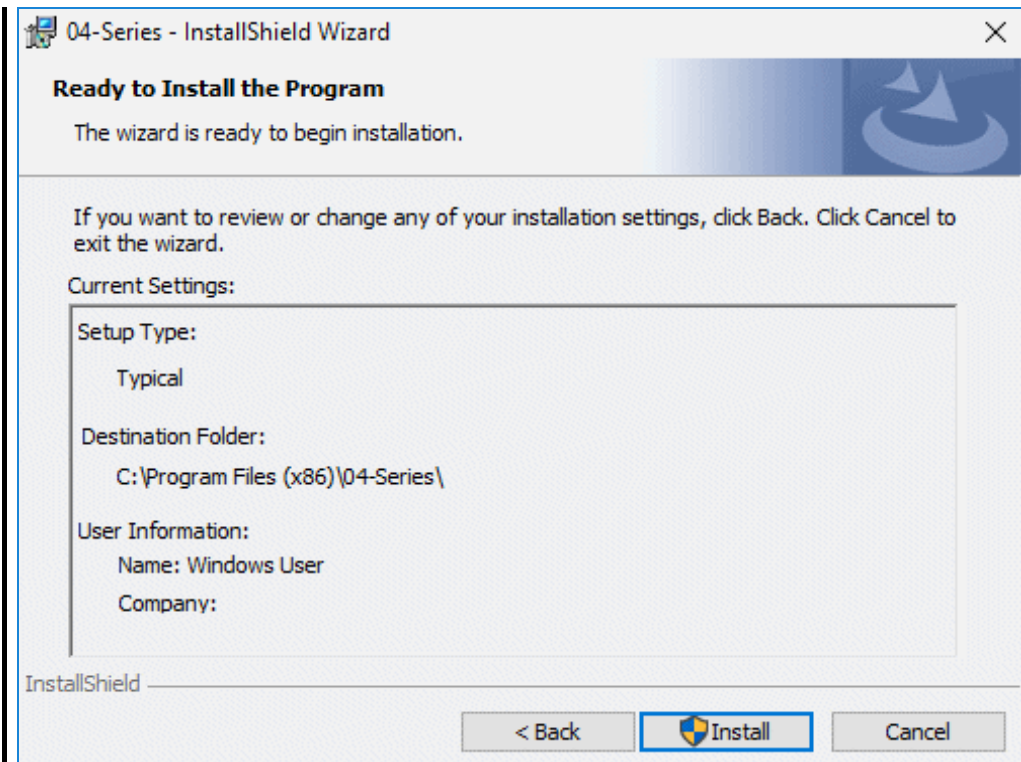
Enter the user information, then click the “Next” button.

- Destination folder



To install in this folder, click the “Next” button. To install in a different folder, click the “Change...” button.

- Start setup

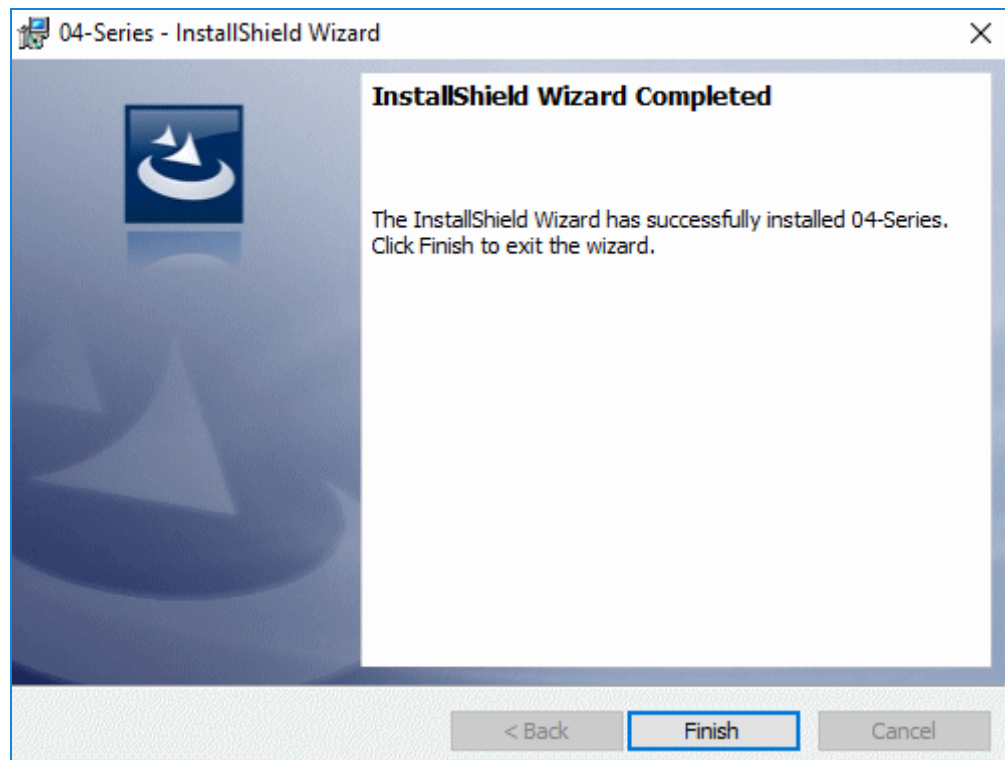


Click the "Install" button to begin installing.

* The user account control screen is displayed. Click "Yes".

- Complete

The following screen will appear once setup is complete:



Click "Finish" to complete the setup.

The program can be used as soon as setup is complete.

CAUTION**Saving past data before reinstalling**

Note the following points if reinstalling the program:

1. Uninstall the program before reinstalling.
2. If the program is uninstalled after use, certain files will remain undeleted. One such file is the "GP04.mdb" database file. If you wish to save past data, save this file to another location before deleting the folder.

CAUTION**Installation precautions**

This software requires libraries for various drivers for the Windows system. Installing the software automatically initiates the process required to incorporate these libraries.

You will be asked to install system libraries with administrator privileges.

When prompted, log in as an administrator and install the system libraries.

You will then be asked to restart Windows. When Windows restarts, log in once again as a general user, then install the application.

(To install the libraries and the application, simply launch setup.exe on the CD-ROM. Administrator privileges are required only if the necessary libraries are not present in the system folder.)

Using with a network connection

Check the following before installing on a PC connected to a network:

IrDA communication uses certain TCP/IP-based technology (communication technology used in the Internet, etc.) and uses a special communication group and IP address.

For this reason, communications may be blocked in certain cases by strong Internet security software.

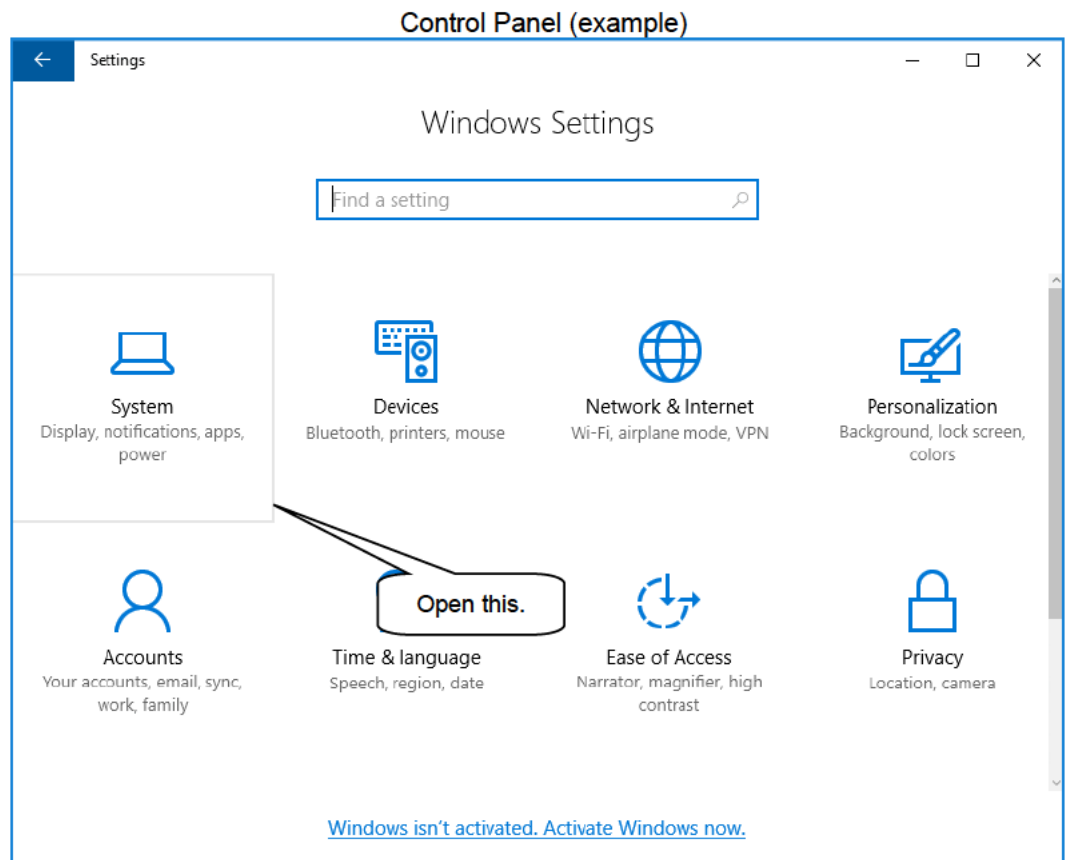
Where possible, run the software on a PC not connected to a network.

If use on a PC connected to a network is unavoidable, carefully assess the security settings before use.

2-4. Uninstallation procedure

- Startup

To uninstall the software, click “Start” on the taskbar, click “Settings”, and launch the Control Panel.

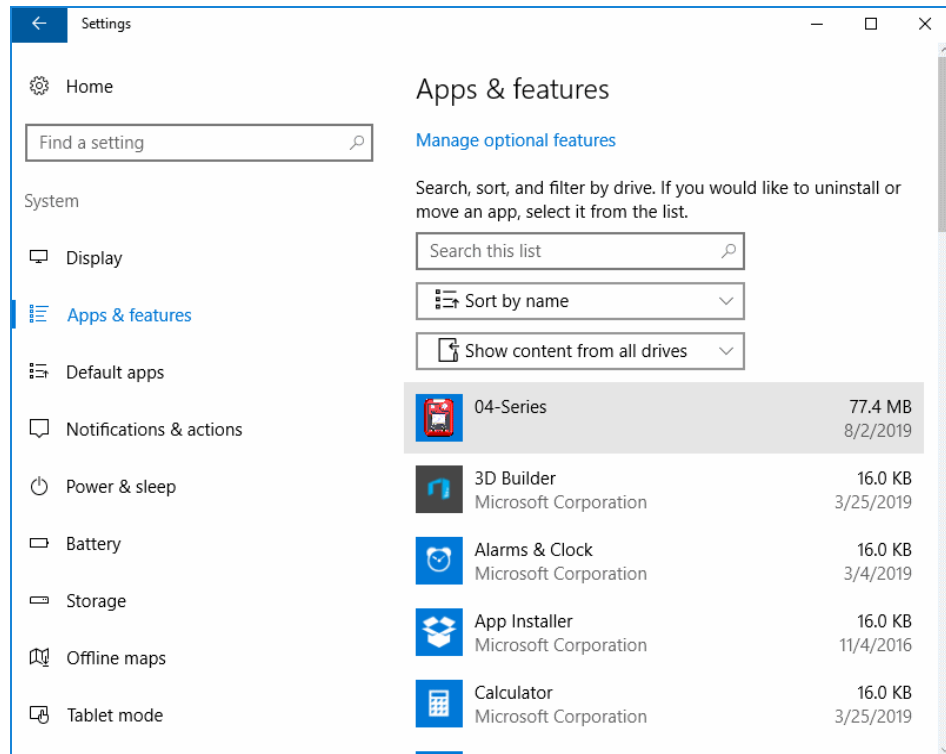


Click to open “System” in the Control Panel.

CAUTION: The procedure and screen contents may differ depending on the Windows version.

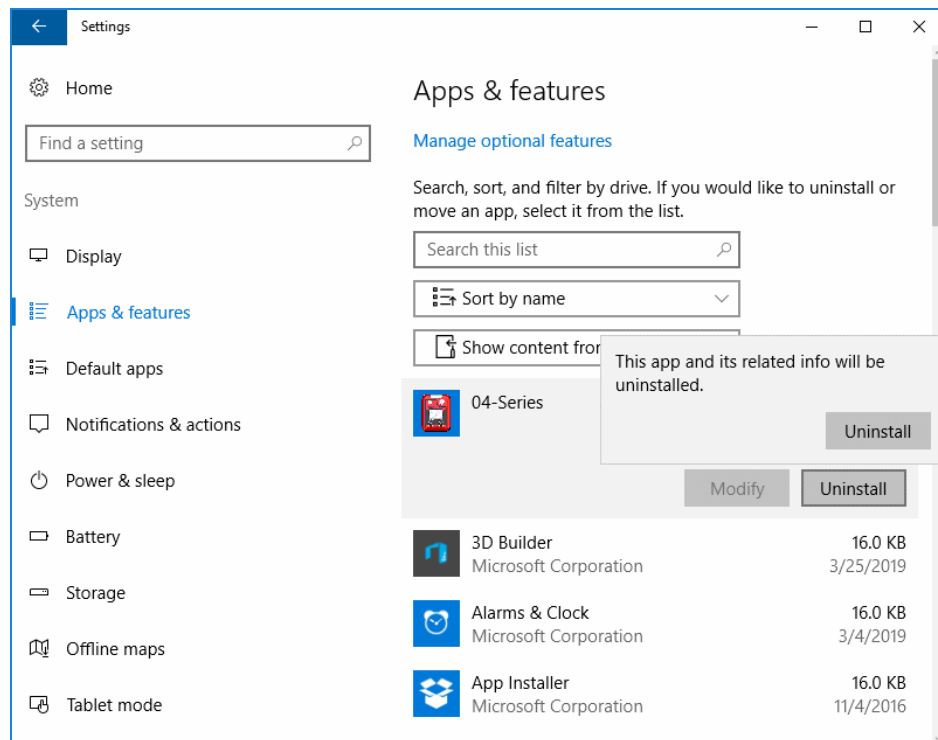
- Select 04 Series

Clicking “System” opens the following window:



Click “04-Series”.

- Start deletion



Click “Uninstall” to display the confirmation screen.

Click “Uninstall” on the confirmation screen.

* The user account control screen is displayed. Click “Yes”.

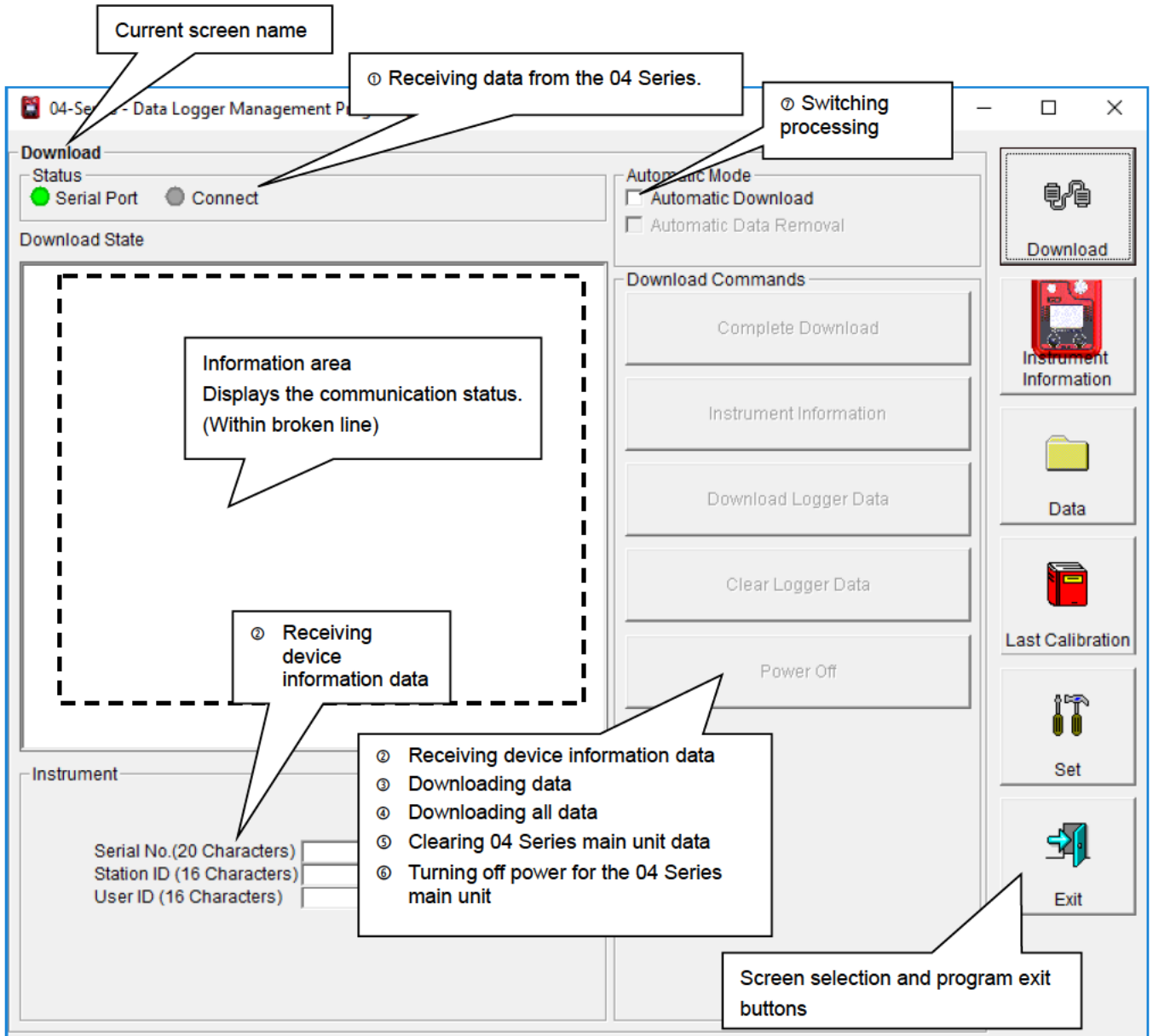
CAUTION: The message “Do you want to remove the shared file?” may appear when uninstalling. Select “No”. Selecting “Yes” may affect other applications.

3. Operating Procedures

Start the program by clicking the “04-Series” shortcut on the desktop or by clicking “04-Series” on the Start menu.

3-1. Download screen

The Download screen follows the splash screen.



To start data communication, place the 04 Series main unit in a suitable location, launch this program, and turn on power for the main unit. The program will automatically determine whether communication is possible; if so, it will enter reception standby mode.

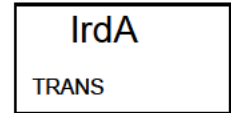
① Receiving data from the 04 Series

● Main unit preparation

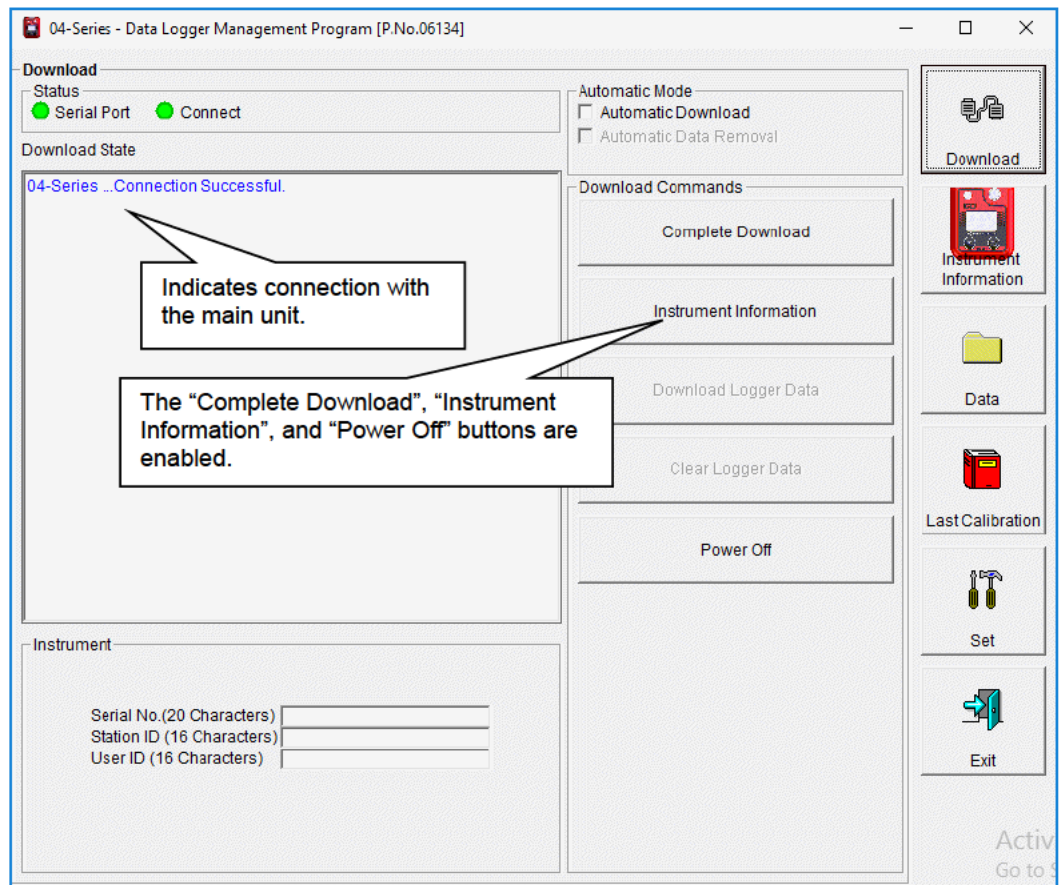
1. Start this software.
2. Place the 04 Series main unit in a location where communication is possible, after turning off the power for the main unit.
3. Turn on the power for the 04 Series main unit.

CAUTION: Be sure to place the 04 Series main unit in a location where communication is possible before turning on the power.
 Connection cannot be made if moved to a location where communication is possible with the power already on.

The LCD on the 04 Series main unit will appear as shown on the right. →
 (This may be somewhat difficult to read due to the display limitations of the 04 Series LCD.)

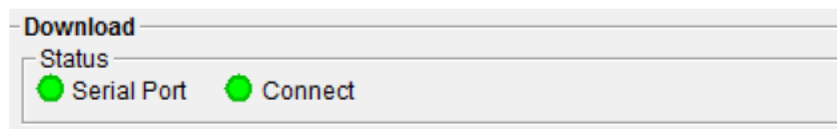


The information area displays the following information:



CAUTION: If the details shown in the information area differ from those shown here, power off the 04 Series main unit and check and change the location of the main unit before turning on the power once again.

The "Status" area changes to indicate communication is possible.



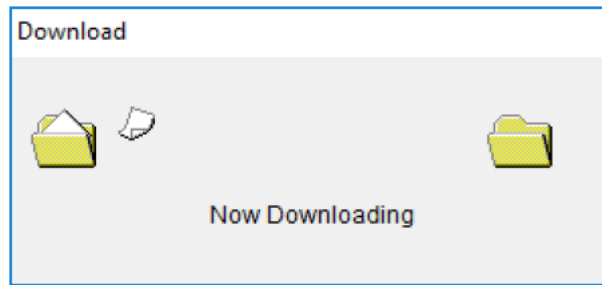
Serial Port:
 Communication possible: Green The PC port is available for use.
 Communication not possible: Red

Connect:
 Standby: Gray
 Communicating: Green

② Receiving device information data

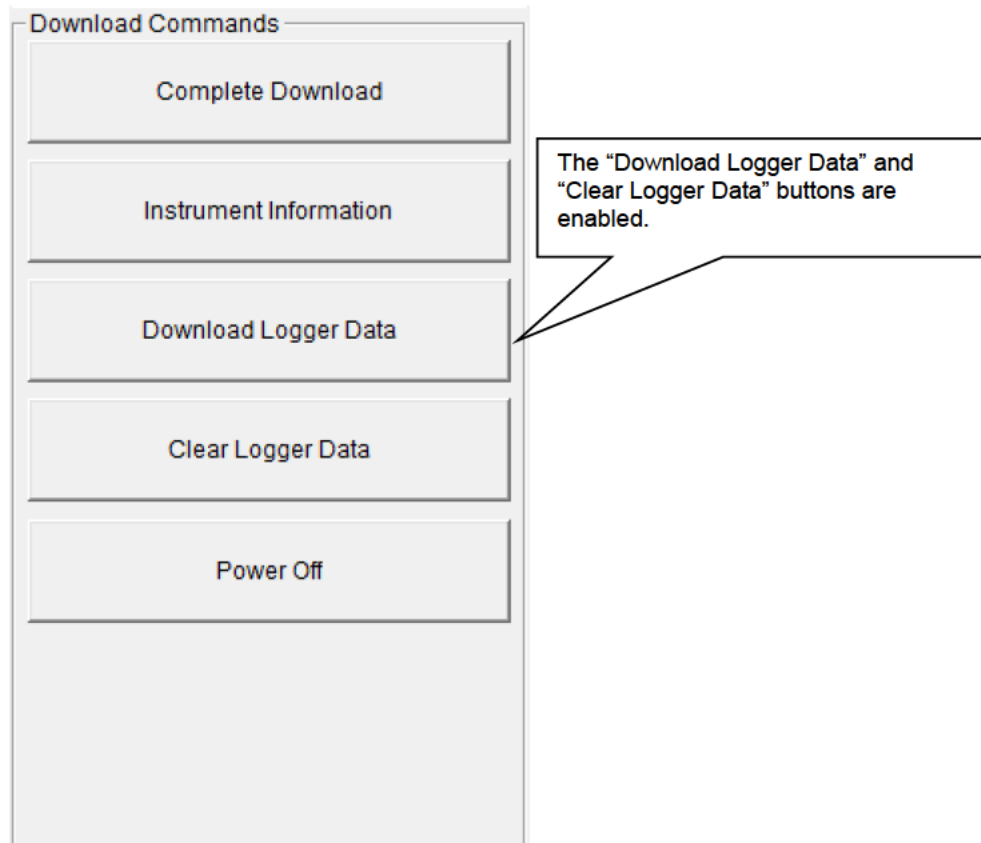
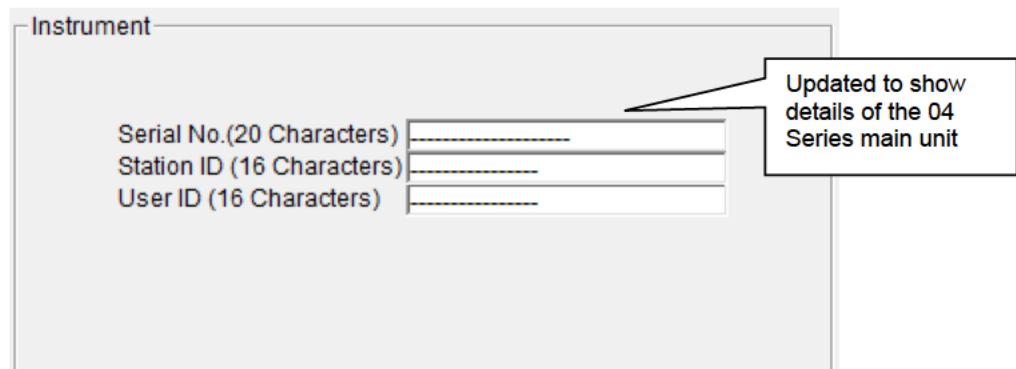
● Receive device information

First, click the "Instrument Information" button in the window on the previous page to receive device information data.



An animated display will appear while data is being received.

Once the "Instrument Information" data is received, the details shown in the "Instrument" area below will be updated, and the "Download Logger Data" and "Clear Logger Data" buttons will be enabled.

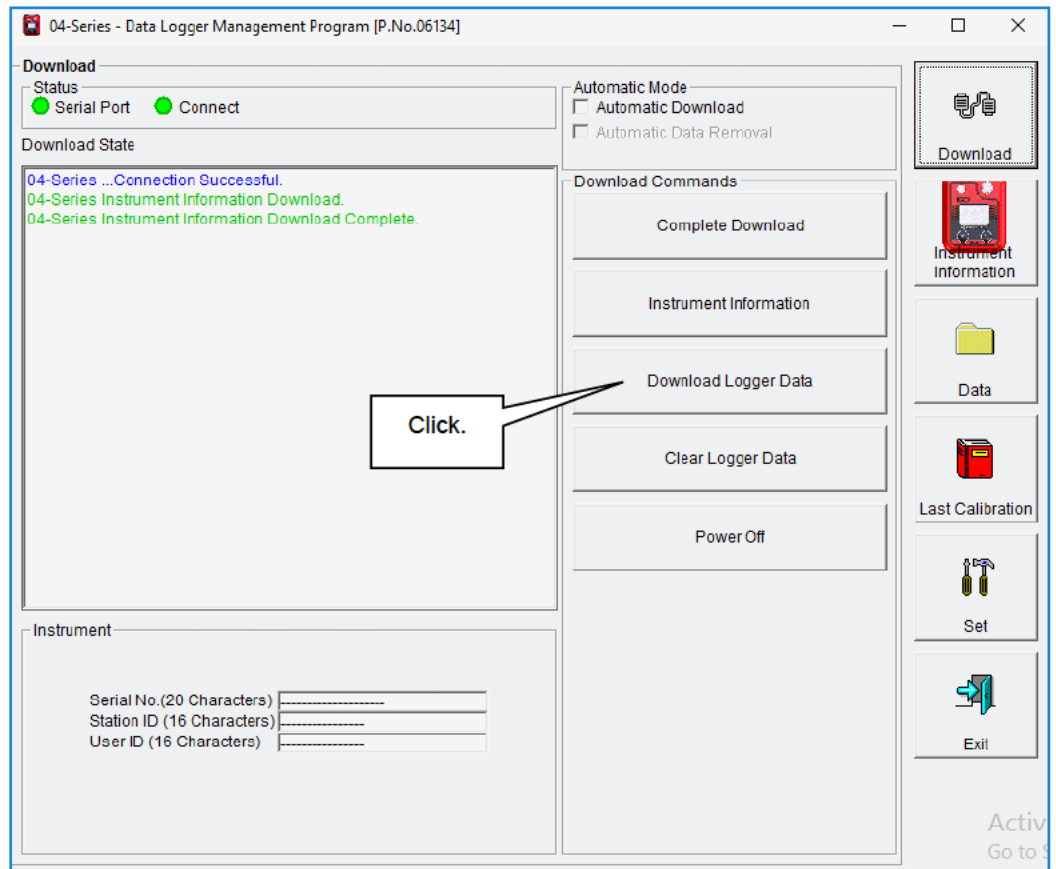


③ Downloading data

- Trend data
- Event data

After clicking the “Instrument Information” button and downloading the device information data, the “Download Logger Data” button is enabled. The “Download Logger Data” button allows trend data and event data to be downloaded.

Click the “Download Logger Data” button.



The information area displays the data receiving status.

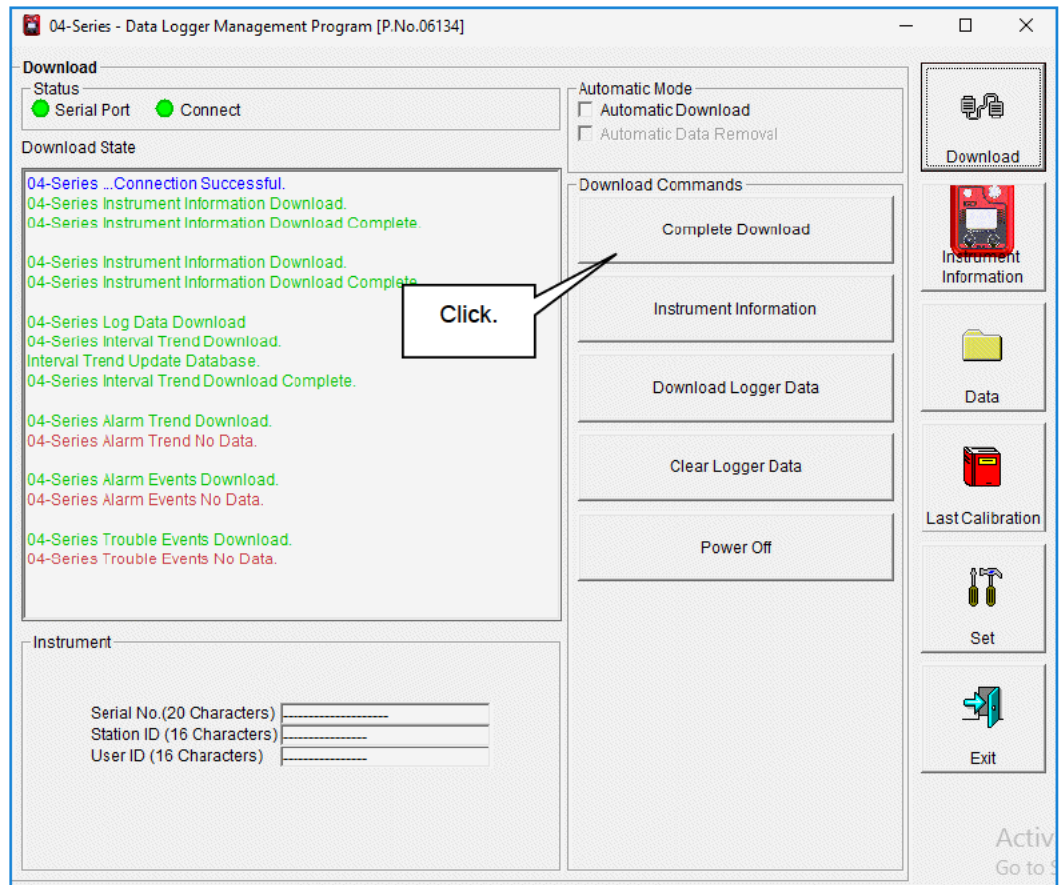
CAUTION: Other download buttons and the “Set” button are disabled while data is being downloaded, as access to other data is not permitted.

④ Downloading all main unit data

- All data

Clicking the “Complete Download” button downloads all data, including “Instrument Information”, “Interval Trend”, “Alarm Trend”, “Alarm Events”, “Trouble Events”, and “Power ON/OFF Events” data.

Click the “Complete Download” button.



The information area displays the data receiving status.

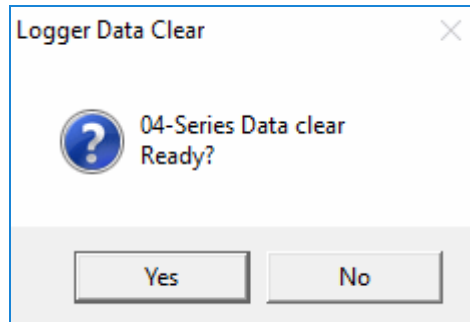
CAUTION: Other download buttons and the “Set” button are disabled while data is being downloaded, as access to other data is not permitted.

⑤ Clearing 04 Series main unit data

- Clear data

Clicking the “Clear Logger Data” button clears all data inside the 04 Series.

Click the “Clear Logger Data” button.



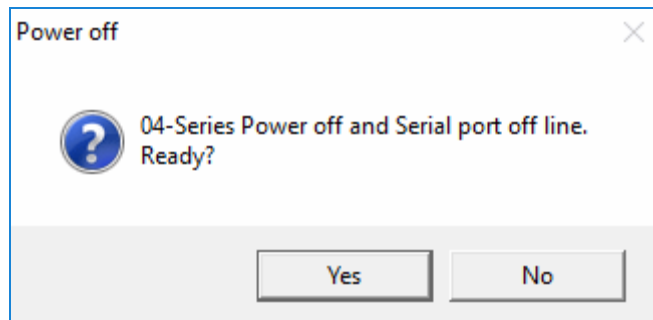
Click “Yes” to begin clearing the data.
Once cleared, data cannot be restored. Store required data before clearing.

⑥ Turning off power for the 04 Series main unit

- Power off

Clicking the “Power Off” button turns off the power for the 04 Series main unit and resets the PC serial port.

1. Click the “Power Off” button.

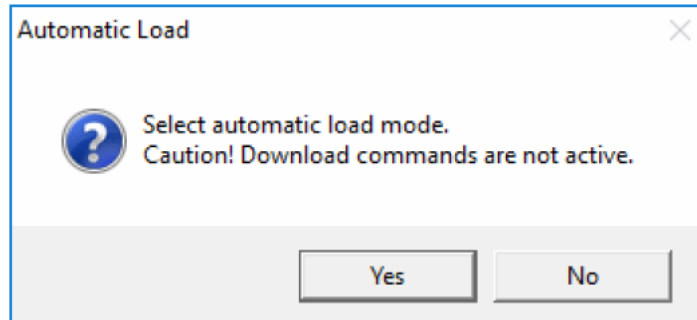
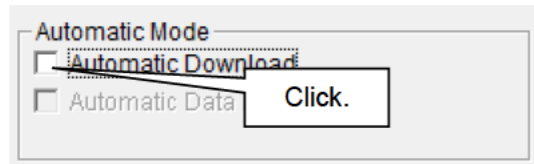


Click “Yes” to begin powering off the 04 Series main unit and to reset the PC serial port before switching to standby to await data from the main unit.

⑦ Switching to automatic processing

● Automatic download mode

1. Click to select the “Automatic Download” checkbox. (The screen here shows the checkbox before it is selected.)



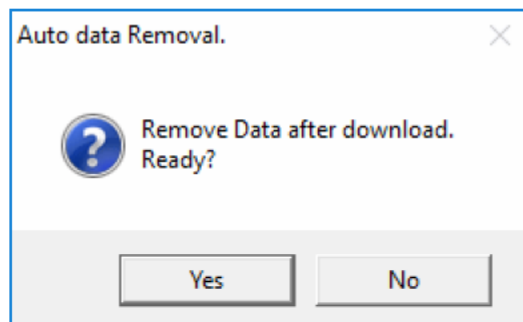
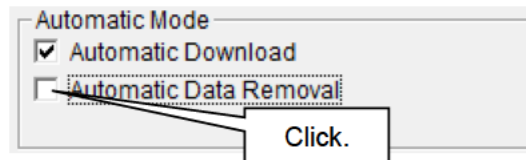
Click “Yes” to switch to automatic processing and to download data from the main unit automatically when communication is performed next.
Click “No” to cancel the mode change.

When automatic downloading is selected, the PC will automatically download all data when the 04 Series main unit is powered on. The 04 Series main unit will then power off.
Data cannot be downloaded manually while automatic processing is underway.

● Automatic deletion after downloading

Automatic processing can be configured to automatically delete downloaded data after it is downloaded.

1. Click to select the “Automatic Data Removal” checkbox.



Click “Yes” to automatically delete data inside the 04 Series after all data is downloaded.

* This reduces download times when repeating the Download → Delete → Download procedure several times.

3-2. Instrument Information screen

Click the “Instrument Information” button on the right-hand side of the screen to display the following screen. This screen lists device information data for the connected 04 Series main unit.

Instrument Information [Connected]
04-Series Status

Calibration History

Gas	Calib.Date	Before	After	A.Cal.	Cal.Due(Days)
CO(2000ppm)	1/1/2018	0	0	50	Now
---(--)	---	---	---	---	---

Last Bump Test

Gas	Bump Test Date	Test Result	Concentration	mp Test Due(Da
CO(2000ppm)	1/1/2018	0	0	Now
---(--)	---	---	---	---

Warning and Alarm point

Gas	Warning	Alarm	AlarmH	STEL	TWA
CO(2000ppm)	25	50	50	200	25
---(--)	---	---	---	---	---

Instrument Information Fields:

- Serial No. (20 Characters)
- Station ID (16 Characters)
S ID 001
- User ID (16 Characters)
U ID 001

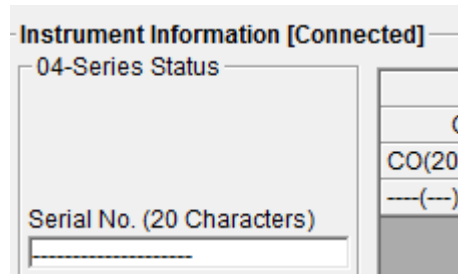
Right Sidebar Buttons: Download, Instrument Information, Data, Last Calibration, Set, Exit

CAUTION: This screen is read-only. Data cannot be edited on this screen. → See 3-6. Set screen.
No data is displayed unless “Instrument Information” data is downloaded.

① Data source information

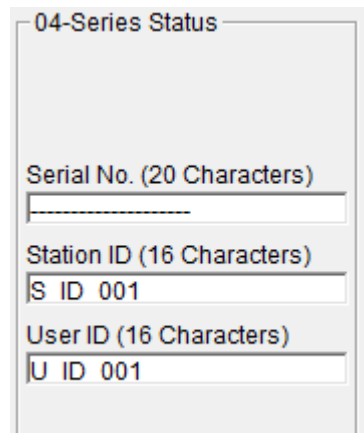
- Data source information

The indication will be “[Connected]” if information for the connected gas monitor main unit is displayed.



② Status information

- Information details



Displays the “Serial No.”, “Station ID”, and “User ID” stored inside the main unit.
CAUTION: These boxes are read-only and cannot be edited.

③ Calibration history information

● Calibration history details

Calibration History					
Gas	Calib.Date	Before	After	A.Cal.	Cal.Due(Days)
CO(2000ppm)	1/1/2018	0	0	50	Now
---(--)	----	----	----	----	----

Details:

- Gas : Target gas name (full scale)
- Calib.Date : Date of last calibration
- Before : Concentration before last calibration
- After : Concentration/calibration failure after last calibration
- A. Cal. : Automatic calibration concentration
- Cal.Due(Days) : Warranty period for uncalibrated state (A warning is displayed in red if the calibration has expired.)

● Bump test history details

Last Bump Test				
Gas	Bump Test Date	Test Result	Concentration	mp Test Due(Da
CO(2000ppm)	1/1/2018	0	0	Now
---(--)	----	----	----	----

Details:

- Gas : Target gas name (full scale)
- Bump Test Date : Date of last bump test
- Test Result : Concentration result for last bump test
- Concentration : Calibration gas concentration for last bump test
- Bump Test Due(Days) : Warranty period for non-bump tested state (A warning is displayed in red if the warranty has expired.)

④ Alarm setpoints

● Details

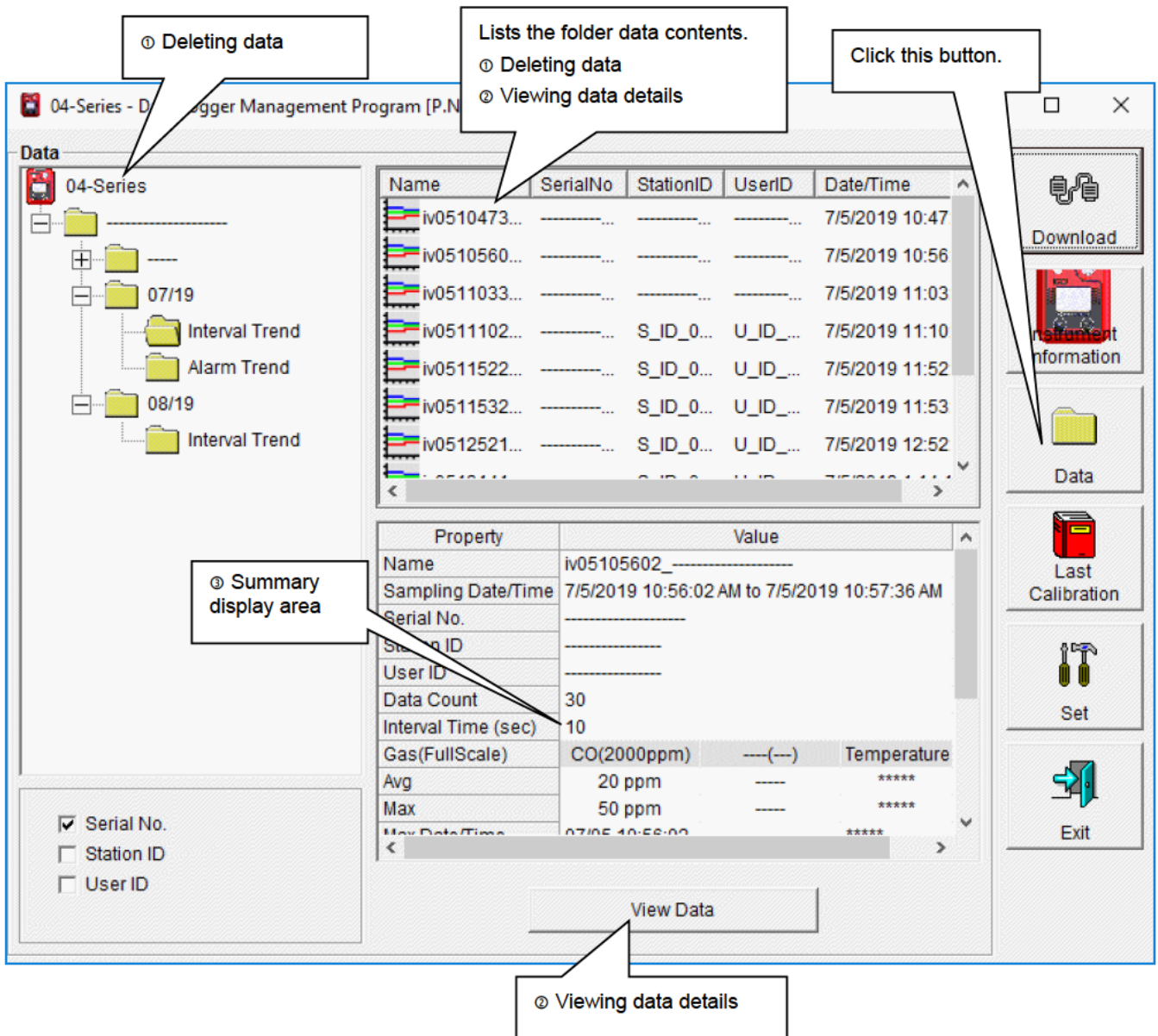
Warning and Alarm point					
Gas	Warning	Alarm	AlarmH	STEL	TWA
CO(2000ppm)	25	50	50	200	25
---(--)	----	----	----	----	----

Details:

- Gas : Target gas name (full scale)
- Warning : 1st alarm setpoint concentration
- Alarm : 2nd alarm setpoint concentration
- AlarmH : 3rd alarm setpoint concentration
- STEL : STEL alarm setpoint concentration
- TWA : TWA alarm setpoint concentration

3-3. Data screen

Click the “Data” button on the right-hand side of the screen to display the following screen. This screen lists the downloaded data.



This screen can be used in the same way as Windows Explorer. However, the following operations are not available:

1. Renaming data
2. Moving data to other locations

The Explorer-style folders are displayed hierarchically in order of serial number, station ID, and user ID.

The folder and data names have the following formats:

Folder name: 03/11 = Data for March 2011

File name: 22111930_3EB = Interval trend for 11:19:30 on 22nd (date and time of logging start)

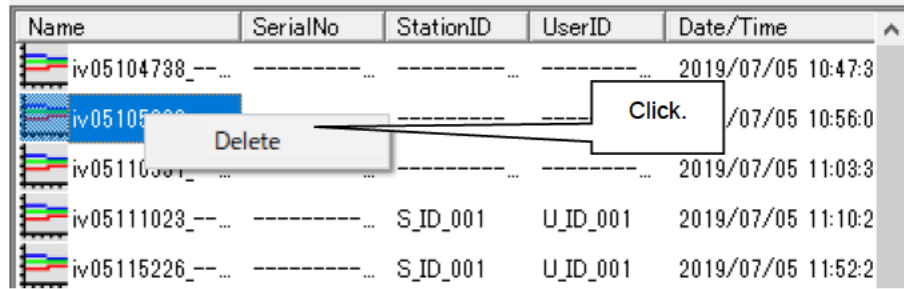
al26150419_3EB = Alarm trend for 15:04:19 on 26th (date and time of alarm occurrence)

The number of data samples allowed in each folder is limited by the PC’s hard disk capacity. To maintain acceptable response times, you should back up data files. For more information, refer to 4. Data Maintenance.

① Deleting data

● Delete

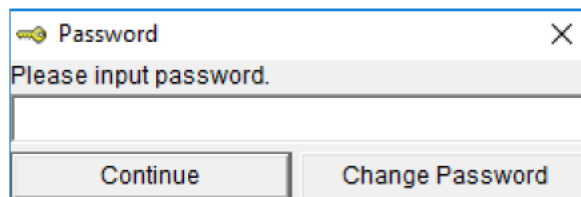
1. Click and select the data (folder) you want to delete.
2. Right-click without moving the mouse.



Click "Delete" on the "Delete" menu that appears.

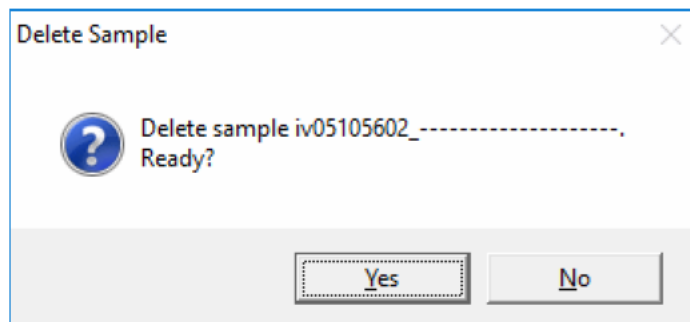
● Password input

1. Enter the password at the prompt, then click the "Continue" button.



CAUTION: Clicking the "Continue" button without entering a password will cancel the deletion.

2. The following message will appear when you enter the correct password and click the "Continue" button:



Click the "Yes" button to delete the data.

Click the "No" button to cancel data deletion.

CAUTION: The default password immediately after installation is "Riken" (not case sensitive). To learn how to change the password, refer to "3-5. ④ Changing password".

② Viewing data details

● To data details

1. Click the data whose details you wish to view. Confirm that the summary appears in the summary display area, then click the "View Data" button.

Or:

2. Double-click the data whose details you wish to view.

To learn how to view data details: → Refer to "3-4. Data View screen".

③ Summary display area

● Details

A summary of the data is displayed if the data selected is normal data.
Interval Trend

Property	Value		
Name	iv05105602_-----		
Sampling Date/Time	7/5/2019 10:56:02 AM to 7/5/2019 10:57:36 AM		
Serial No.	-----		
Station ID	-----		
User ID	-----		
Data Count	30		
Interval Time (sec)	10		
Gas(FullScale)	CO(2000ppm)	---(---)	Temperature
Avg	20 ppm	---	*****
Max	50 ppm	---	*****
Max Date/Time	07/05 10:56:02	----	*****
Min	*****	----	*****
Min Date/Time	*****	----	*****
Warning	25 ppm	---	*****
Alarm	50 ppm	---	*****
AlarmH	50 ppm	---	*****

- Name : Data name
- Sampling Date/Time : Date and time of measurement start and end
- Serial No./Station ID/User ID : 04 Series main unit status
- Data Count : Number of data samples
- Interval Time (sec) : Sampling interval (seconds)
- Gas(FullScale) : Gas (full scale)
- Avg : Gas average value
- Max : Gas data maximum value
- Max Date/Time : Date and time of maximum value detection
- Min : Gas data minimum value
- Min Date/Time : Date and time of minimum value detection
- Warning : 1st alarm setpoint
- Alarm : 2nd alarm setpoint
- AlarmH : 3rd alarm setpoint
- STEL : STEL alarm setpoint
- TWA : TWA alarm setpoint

Alarm Events

DateTime	Gas	Event
2019/07/24 17:35:21	CO(2000ppm)	WARNING
2019/07/24 17:35:15	CO(2000ppm)	WARNING
2019/07/24 17:35:02	CO(2000ppm)	WARNING
2019/07/24 17:34:44	CO(2000ppm)	WARNING
2019/07/24 17:34:41	CO(2000ppm)	WARNING
2019/07/24 17:34:31	CO(2000ppm)	WARNING
2019/07/24 17:34:17	CO(2000ppm)	WARNING
2019/07/24 17:34:07	CO(2000ppm)	WARNING
...	131 Datas	

- DateTime : Date and time of event occurrence
- Gas : Gas generated
- Event : Event type

Alarm Trend

Property	Value		
Name	al05105603_-----		
Alarm Date/Time	7/5/2019 10:56:03 AM		
Serial No.	-----		
Station ID	-----		
User ID	-----		
Data Count	720		
Interval Time (sec)	5		
Gas(FullScale)	CO(2000ppm)	---(---)	Temperature
Value	50 ppm	----	15.6 $\text{^{\circ}C}$
Warning	25 ppm	----	*****
Alarm	50 ppm	----	*****
AlarmH	50 ppm	----	*****
STEL	200 ppm	----	*****
TWA	25 ppm	----	*****

Name : Data name
 Alarm Date/Time : Date and time of alarm occurrence
 Serial No./Station ID/User ID : 04 Series main unit status
 Data Count : Number of data samples
 Interval Time (sec) : Sampling interval
 Gas(FullScale) : Gas (full scale)
 Value : Concentration at time of alarm occurrence
 Warning : 1st alarm setpoint
 Alarm : 2nd alarm setpoint
 AlarmH : 3rd alarm setpoint
 STEL : STEL alarm setpoint
 TWA : TWA alarm setpoint

Calibration History

DateTime	Gas	Before	After
2019/07/05 10:55:19	CO(2000ppm)	46 ppm	50 ppm
	----(---)	-----	-----
2019/07/05 10:52:44	CO(2000ppm)	8 ppm	-----
	----(---)	-----	-----

DateTime : Date and time of event occurrence
 Gas : Gas
 Before : Concentration before calibration
 After : Concentration after calibration

Trouble Events

DateTime	Gas/Body	Event
2019/07/05 10:57:26	CO(2000ppm)	Fail(Air)
2019/07/05 10:52:44	CO(2000ppm)	Fail(Span)

DateTime : Date and time of event occurrence
 Gas/Body : Gas generated or 04 Series main unit
 Event : Event type

Bump Test

DateTime	Gas	Test Result	Concentration	Judge
2019/10/10 12:5	CO(2000ppm)	0 ppm	80 ppm	FAIL
2019/10/10 12:5	O2(40.0%)	20.8 %	0.0 %	FAIL
2019/10/10 9:03	CO(2000ppm)	0 ppm	80 ppm	FAIL
2019/10/10 9:03	O2(40.0%)	21.1 %	0.0 %	FAIL
...	Total	6	Datas	

- DateTime : Date and time of event occurrence
- Gas : Gas
- Test Result : Test result concentration
- Concentration : Calibration gas concentration
- Judge : Test assessment

3-4. Data View screen

This screen displays data details in table and graph format.

① Selecting table or graph ② Sending to printer ③ Saving to file ④ To view data summary at the same time

No	Date/Time	CO(2000ppm)	---	---	Temperature
1	7/5/2019 10:56:03 AM	ALARM H	---	---	---
2	7/5/2019 10:56:03 AM	ALARM	---	---	---
3	7/5/2019 10:56:03 AM	WARNING	---	---	---
4	7/5/2019 10:56:07 AM	-ALARM H	---	---	---
5	7/5/2019 10:56:07 AM	-ALARM	---	---	---
6	7/5/2019 10:56:12 AM	43 ppm	---	---	15.6 °C
7	7/5/2019 10:56:15 AM	-WARNING	---	---	---
8	7/5/2019 10:56:15 AM	NORMAL	---	---	---
9	7/5/2019 10:56:19 AM	WARNING	---	---	---
10	7/5/2019 10:56:22 AM	24 ppm	---	---	15.6 °C
11	7/5/2019 10:56:25 AM	-WARNING	---	---	---
12	7/5/2019 10:56:25 AM	NORMAL	---	---	---
13	7/5/2019 10:56:31 AM	WARNING	---	---	---
14	7/5/2019 10:56:32 AM	24 ppm	---	---	15.6 °C
15	7/5/2019 10:56:33 AM	-WARNING	---	---	---
16	7/5/2019 10:56:33 AM	NORMAL	---	---	---
17	7/5/2019 10:56:42 AM	23 ppm	---	---	15.6 °C
18	7/5/2019 10:56:52 AM	24 ppm	---	---	15.6 °C
19	7/5/2019 10:56:55 AM	WARNING	---	---	---
20	7/5/2019 10:57:01 AM	-WARNING	---	---	---
21	7/5/2019 10:57:01 AM	NORMAL	---	---	---
22	7/5/2019 10:57:02 AM	24 ppm	---	---	15.6 °C
23	7/5/2019 10:57:07 AM	WARNING	---	---	---
24	7/5/2019 10:57:11 AM	-WARNING	---	---	---
25	7/5/2019 10:57:11 AM	NORMAL	---	---	---
26	7/5/2019 10:57:12 AM	24 ppm	---	---	15.6 °C
27	7/5/2019 10:57:22 AM	24 ppm	---	---	15.6 °C
28	7/5/2019 10:57:26 AM	AIR	---	---	---
29	7/5/2019 10:57:26 AM	Fail(Air)	---	---	---
30	7/5/2019 10:57:32 AM	24 ppm	---	---	15.6 °C

Click to select the checkbox to the left of “Event Only” or “Condensed” to change the display as follows.

- Event Only: Displays event data only.
- Condensed: Displays only fluctuating sample data.

CAUTION: No graph will be drawn unless there are at least five samples.
 The “Alarm Trend” data table highlights the locations of active alarms in red.

The mouse cursor will appear as follows when hovered over “WARNING”, “ALARM”, or “OVER” event data. Click on the cell here to search for corresponding trend data and to display the data (if any) in a separate window.



For WARNING, ALARM, and OVER

Separate window for WARNING, ALARM, and OVER
 Click the “Return” button to exit the window.

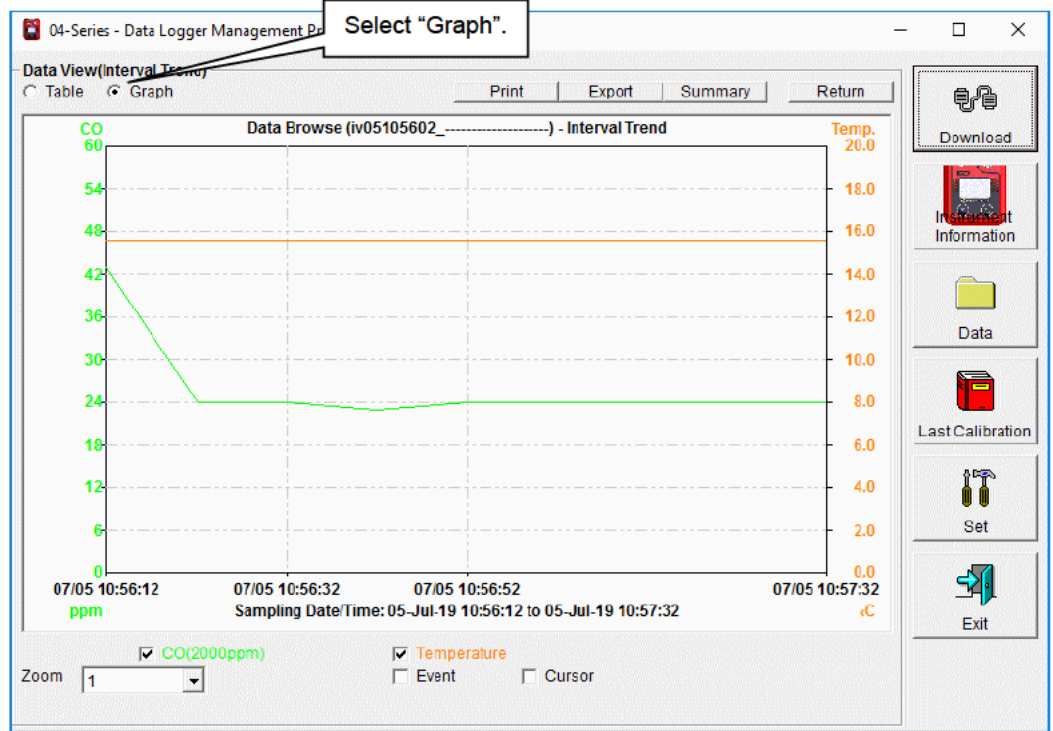
* The “Alarm Trend” data table highlights the locations of active alarms in red.

No	Date/Time	CO(2000ppm)	---	---	Temperature
344	7/5/2019 10:54:39 AM	---	---	---	---
345	7/5/2019 10:54:42 AM	---	---	---	---
346	7/5/2019 10:54:48 AM	---	---	---	---
347	7/5/2019 10:54:53 AM	---	---	---	---
348	7/5/2019 10:54:54 AM	---	---	---	---
349	7/5/2019 10:54:59 AM	---	---	---	---
350	7/5/2019 10:54:59 AM	---	---	---	---
351	7/5/2019 10:55:12 AM	---	---	---	---
352	7/5/2019 10:55:18 AM	---	---	---	---
353	7/5/2019 10:55:23 AM	---	---	---	---
354	7/5/2019 10:55:28 AM	---	---	---	---
355	7/5/2019 10:55:33 AM	---	---	---	---
356	7/5/2019 10:55:38 AM	---	---	---	---
357	7/5/2019 10:55:43 AM	---	---	---	---
358	7/5/2019 10:55:48 AM	---	---	---	---
359	7/5/2019 10:55:53 AM	---	---	---	---
360	7/5/2019 10:55:58 AM	---	---	---	---
361	7/5/2019 10:56:03 AM	---	---	---	---
362	7/5/2019 10:56:08 AM	50 ppm	---	---	15.4 °C
363	7/5/2019 10:56:13 AM	20 ppm	---	---	15.3 °C
364	7/5/2019 10:56:18 AM	27 ppm	---	---	15.4 °C
365	7/5/2019 10:56:23 AM	23 ppm	---	---	15.4 °C
366	7/5/2019 10:56:28 AM	25 ppm	---	---	15.4 °C
367	7/5/2019 10:56:33 AM	20 ppm	---	---	15.4 °C
368	7/5/2019 10:56:38 AM	24 ppm	---	---	15.4 °C

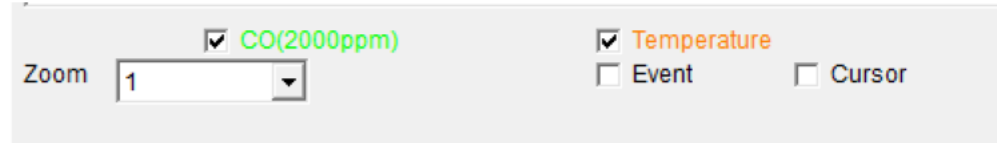
① Selecting table or graph

- Select graph

1. Select "Graph" of the "Table" and "Graph" radio buttons at the top left of the screen.



Various operations are available using the checkboxes and combo boxes at the bottom of the screen.



- Upper checkboxes (gas names) : Display or hide the corresponding gas data.
- "Zoom" combo box : Specify a horizontal axis scale factor appropriate for the number of samples.
- "Event" checkbox : Displays event information markers for alarms and other events.
- "Cursor" checkbox : Displays the cursor on the graph.

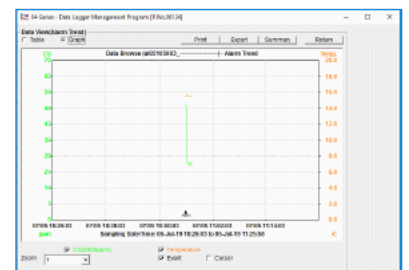
CAUTION: The maximum value on the vertical axis of the graph is adjusted automatically based on the following formula:
 If the maximum value for data with no events is "x" and the full scale is 10 or greater:
 $Y_{max} = \{ \text{int} (x / 10) + 1 \} \times 10$; for full scale under 10: $Y_{max} = \{ \text{int} (x) + 1 \}$
 "int": Decimal values are discarded.

CAUTION: No graph will be drawn unless there are five or more normal concentration data samples.
 Data consisting only of events cannot be displayed in graph form because they do not contain concentration information.
 The mouse cursor will appear as follows when hovered over "WARNING", "ALARM", or "OVER" event data. Click here to search for corresponding trend data and to display the data (if any) in a separate window.



For WARNING, ALARM, and OVER

Separate window for WARNING, ALARM, and OVER
 Click the "Return" button to exit the

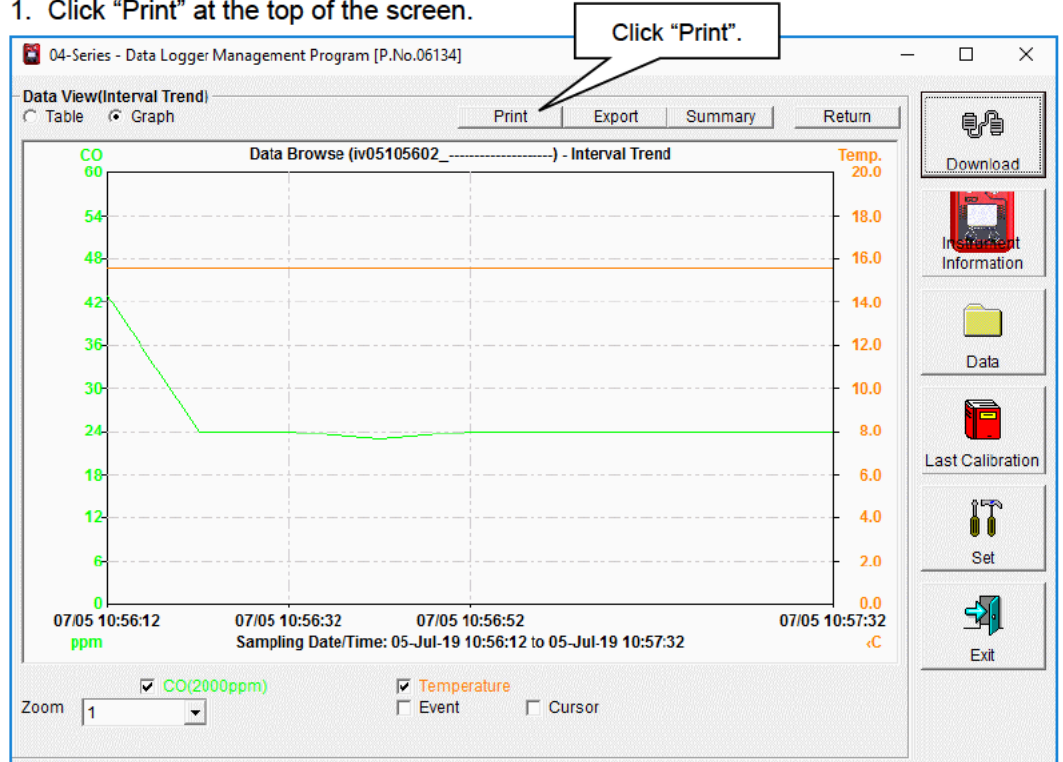


② Sending to printer

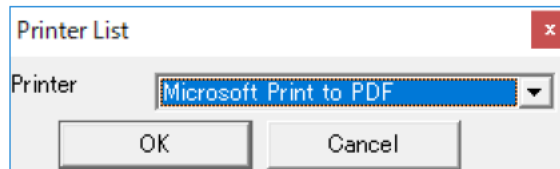
- Print

Details currently displayed on the Data View screen can be sent to the printer to be printed.

1. Click "Print" at the top of the screen.



The printer selection window appears. Select the desired printer and click the "OK" button.

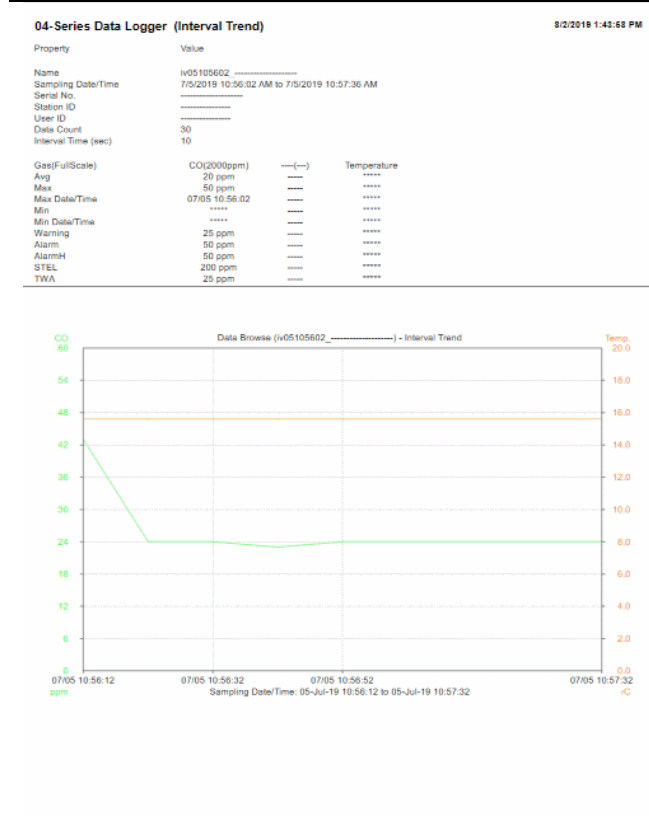


Click the "OK" button to begin printing.

Click the "Cancel" button to return to the Data View screen without printing.

Sample printout (graph print)

Sample printout (table print)



04-Series Data Logger (Interval Trend)

8/2/2019 1:44:16 PM

Property Value

Name iv05105602
 Sampling Date/Time 7/5/2019 10:56:02 AM to 7/5/2019 10:57:36 AM
 Serial No. -----
 Station ID -----
 User ID -----
 Date Count 30
 Interval Time (sec) 10

Gas(FullScale) CO(2000ppm) ---(-) Temperature
 Avg 20 ppm -----
 Max 50 ppm -----
 Max Date/Time 07/05 10:56:02 -----
 Min -----
 Min Date/Time -----
 Warning 25 ppm -----
 Alarm 50 ppm -----
 AlarmH 50 ppm -----
 STEL 200 ppm -----
 TWA 25 ppm -----

No	Date/Time	CO(2000ppm)	Temperature
1	7/5/2019 10:56:03 AM	ALARM H	---
2	7/5/2019 10:56:03 AM	ALARM	---
3	7/5/2019 10:56:03 AM	WARNING	---
4	7/5/2019 10:56:07 AM	-ALARM H	---
5	7/5/2019 10:56:07 AM	-ALARM	---
6	7/5/2019 10:56:12 AM	43 ppm	15.8 °C
7	7/5/2019 10:56:15 AM	-WARNING	---
8	7/5/2019 10:56:15 AM	NORMAL	---
9	7/5/2019 10:56:19 AM	WARNING	---
10	7/5/2019 10:56:22 AM	24 ppm	15.8 °C
11	7/5/2019 10:56:25 AM	-WARNING	---
12	7/5/2019 10:56:25 AM	NORMAL	---
13	7/5/2019 10:56:31 AM	WARNING	---
14	7/5/2019 10:56:32 AM	24 ppm	15.8 °C
15	7/5/2019 10:56:33 AM	-WARNING	---
16	7/5/2019 10:56:33 AM	NORMAL	---
17	7/5/2019 10:56:42 AM	23 ppm	15.6 °C
18	7/5/2019 10:56:52 AM	24 ppm	15.6 °C
19	7/5/2019 10:56:55 AM	WARNING	---
20	7/5/2019 10:57:01 AM	-WARNING	---
21	7/5/2019 10:57:01 AM	NORMAL	---
22	7/5/2019 10:57:02 AM	24 ppm	15.8 °C
23	7/5/2019 10:57:07 AM	WARNING	---
24	7/5/2019 10:57:11 AM	-WARNING	---
25	7/5/2019 10:57:11 AM	NORMAL	---
26	7/5/2019 10:57:12 AM	24 ppm	15.8 °C
27	7/5/2019 10:57:22 AM	24 ppm	15.6 °C
28	7/5/2019 10:57:28 AM	AIR	---
29	7/5/2019 10:57:28 AM	Fall(Air)	---
30	7/5/2019 10:57:32 AM	24 ppm	15.6 °C

Sample printout (calibration history)

Sample printout (alarm events)

04-Series Data Logger (Calibration History)

8/2/2019 1:44:34 PM

Property Value

Serial No. -----
 Station ID -----
 User ID -----
 Last Download 7/5/2019 1:37:25 PM

No	Date/Time	Ch1	Ch2
1	7/5/2019 10:55:19 AM	CO(2000ppm)	---
	Before	46 ppm	---
	After	40 ppm	---
2	7/5/2019 10:52:44 AM	CO(2000ppm)	---
	Before	8 ppm	---
	After	---	---

04-Series Data Logger (Alarm Event)

8/2/2019 1:44:51 PM

Property Value

Serial No. -----
 Station ID -----
 User ID -----
 Last Download 7/25/2019 2:03:25 PM

No	Date/Time	Gas	Event
1	7/24/2019 5:35:21 PM	CO(2000ppm)	WARNING
2	7/24/2019 5:35:15 PM	CO(2000ppm)	WARNING
3	7/24/2019 5:35:02 PM	CO(2000ppm)	WARNING
4	7/24/2019 5:34:44 PM	CO(2000ppm)	WARNING
5	7/24/2019 5:34:41 PM	CO(2000ppm)	WARNING
6	7/24/2019 5:34:31 PM	CO(2000ppm)	WARNING
7	7/24/2019 5:34:17 PM	CO(2000ppm)	WARNING
8	7/24/2019 5:34:07 PM	CO(2000ppm)	WARNING
9	7/24/2019 5:33:58 PM	CO(2000ppm)	WARNING
10	7/24/2019 5:33:16 PM	CO(2000ppm)	WARNING
11	7/24/2019 5:32:59 PM	CO(2000ppm)	WARNING
12	7/24/2019 5:32:51 PM	CO(2000ppm)	WARNING
13	7/24/2019 5:32:49 PM	CO(2000ppm)	WARNING
14	7/24/2019 5:32:44 PM	CO(2000ppm)	WARNING
15	7/24/2019 5:32:42 PM	CO(2000ppm)	WARNING
16	7/24/2019 5:32:40 PM	CO(2000ppm)	WARNING
17	7/24/2019 5:32:20 PM	CO(2000ppm)	WARNING
18	7/24/2019 5:32:18 PM	CO(2000ppm)	WARNING
19	7/24/2019 5:32:01 PM	CO(2000ppm)	WARNING
20	7/24/2019 5:31:41 PM	CO(2000ppm)	WARNING
21	7/24/2019 5:31:10 PM	CO(2000ppm)	WARNING
22	7/24/2019 5:31:08 PM	CO(2000ppm)	WARNING
23	7/24/2019 5:30:54 PM	CO(2000ppm)	WARNING
24	7/24/2019 5:30:47 PM	CO(2000ppm)	WARNING
25	7/24/2019 5:30:32 PM	CO(2000ppm)	WARNING
26	7/24/2019 5:30:23 PM	CO(2000ppm)	WARNING
27	7/24/2019 5:30:19 PM	CO(2000ppm)	WARNING
28	7/24/2019 5:30:17 PM	CO(2000ppm)	WARNING
29	7/24/2019 5:30:09 PM	CO(2000ppm)	WARNING
30	7/24/2019 5:29:47 PM	CO(2000ppm)	WARNING
31	7/24/2019 5:29:24 PM	CO(2000ppm)	WARNING
32	7/24/2019 5:29:19 PM	CO(2000ppm)	WARNING
33	7/24/2019 5:29:09 PM	CO(2000ppm)	WARNING
34	7/24/2019 5:29:00 PM	CO(2000ppm)	WARNING
35	7/24/2019 5:28:44 PM	CO(2000ppm)	WARNING
36	7/24/2019 5:28:01 PM	CO(2000ppm)	WARNING
37	7/24/2019 5:27:43 PM	CO(2000ppm)	WARNING
38	7/24/2019 5:28:42 PM	CO(2000ppm)	WARNING
39	7/24/2019 5:28:28 PM	CO(2000ppm)	WARNING
40	7/24/2019 5:25:54 PM	CO(2000ppm)	WARNING
41	7/24/2019 5:25:52 PM	CO(2000ppm)	WARNING
42	7/24/2019 5:25:33 PM	CO(2000ppm)	WARNING
43	7/24/2019 5:25:18 PM	CO(2000ppm)	WARNING
44	7/24/2019 5:25:05 PM	CO(2000ppm)	WARNING
45	7/24/2019 5:25:00 PM	CO(2000ppm)	WARNING
46	7/24/2019 5:24:54 PM	CO(2000ppm)	WARNING
47	7/24/2019 5:24:52 PM	CO(2000ppm)	WARNING
48	7/24/2019 5:24:45 PM	CO(2000ppm)	WARNING
49	7/24/2019 5:24:42 PM	CO(2000ppm)	WARNING
50	7/24/2019 5:24:30 PM	CO(2000ppm)	WARNING
51	7/24/2019 5:24:24 PM	CO(2000ppm)	WARNING
52	7/24/2019 5:24:20 PM	CO(2000ppm)	WARNING
53	7/24/2019 5:24:08 PM	CO(2000ppm)	WARNING
54	7/24/2019 5:23:41 PM	CO(2000ppm)	WARNING
55	7/24/2019 5:23:33 PM	CO(2000ppm)	WARNING
56	7/24/2019 5:23:25 PM	CO(2000ppm)	WARNING

Sample printout (trouble events)				Sample printout (bump tests)			
04-Series Data Logger (Trouble Event)		8/2/2019 1:46:12 PM		04-Series Data Logger (Bump Test)		11/21/2019 3:22:42 PM	
Property		Value		Property		Value	
Serial No.	-----	Station ID	-----	Serial No.	CX-04 20191009 B489	Station ID	S_ID_005
User ID	-----	User ID	-----	User ID	U_ID_005	Last Download	11/5/2019 10:48:32 AM
Last Download	7/5/2019 1:37:25 PM						
No	Date/Time	Gas/Body	Event	No	Date/Time	Ch1	Ch2
1	7/5/2019 10:57:26 AM	CO(2000ppm)	Fail(Air)	1	10/10/2019 12:55:26 PM	Gas	CO(2000ppm)
2	7/5/2019 10:52:44 AM	CO(2000ppm)	Fail(Span)			Test Result	0 ppm
						Concentration	80 ppm
						Judge	FAIL
				2	10/10/2019 9:03:04 AM	Gas	CO(2000ppm)
						Test Result	0 ppm
						Concentration	80 ppm
						Judge	FAIL
				3	10/10/2019 8:54:22 AM	Gas	CO(2000ppm)
						Test Result	0 ppm
						Concentration	80 ppm
						Judge	FAIL
				4	10/10/2019 8:53:03 AM	Gas	CO(2000ppm)
						Test Result	0 ppm
						Concentration	80 ppm
						Judge	FAIL
				5	10/10/2019 8:51:09 AM	Gas	CO(2000ppm)
						Test Result	0 ppm
						Concentration	80 ppm
						Judge	FAIL
				6	10/9/2019 4:51:23 PM	Gas	CO(2000ppm)
						Test Result	1 ppm
						Concentration	80 ppm
						Judge	FAIL

Printer setup precautions

- ① The detailed printer settings vary depending on the printer used. Refer to the printer instruction manual.
- ② This program does not allow the print area to be specified when printing. This means it is not possible to select and print only a certain part of the data view.
- ③ The setting for the number of copies can be edited only on printers that allow this.

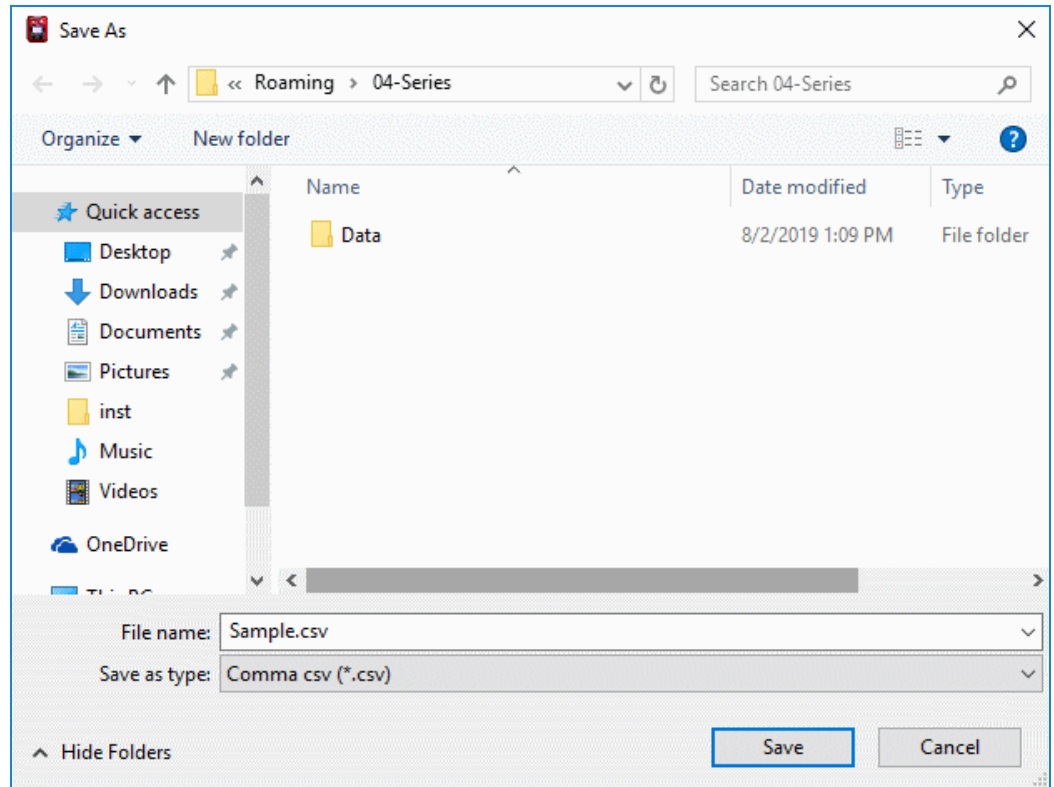
Changes in the settings made here will also apply to other applications subsequently used. (For example, if two copies were set here, two copies may also be printed out when using other applications.)

When printing from other applications after changing the printer settings for this program, check the print settings for that application before printing.

③ Saving to file

- Save

1. Click the “Save” button on the screen.



Specify the destination and file name, then click the “Save” button to save the data.

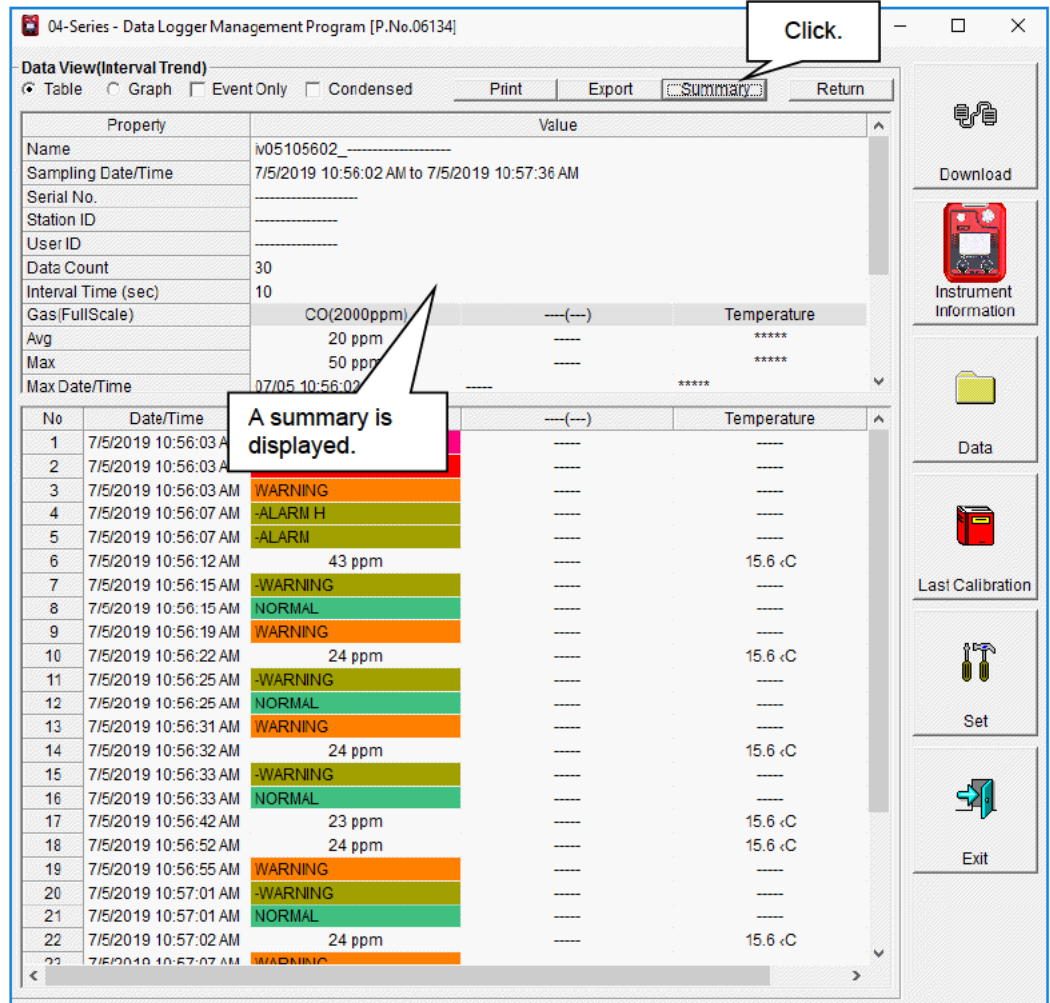
Click the “Cancel” button to cancel saving.

CAUTION: If a table is displayed, the table contents will be saved in CSV format.
If a graph is displayed, the graph will be saved in bitmap format.

④ To view data summary at the same time

● Summary display

1. Click the “Summary” button at the top of the screen.

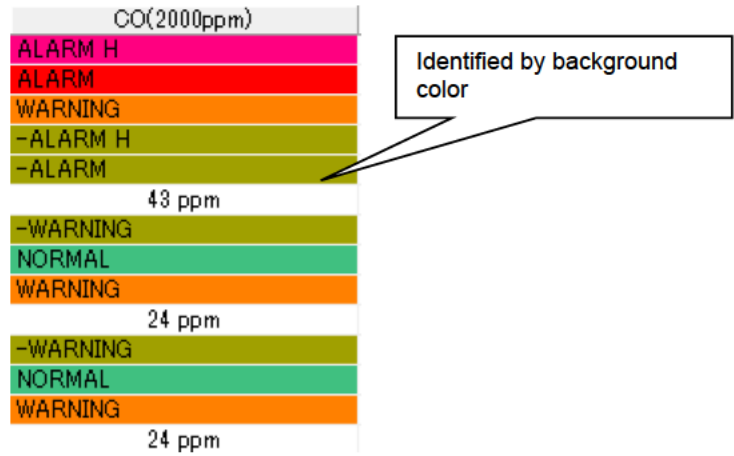


Clicking the “Summary” button while the summary is displayed hides the summary display.

⑤ Table details

● Event colors

The concentration display cells for each gas in the table have different colored backgrounds based on the type of event that occurred.

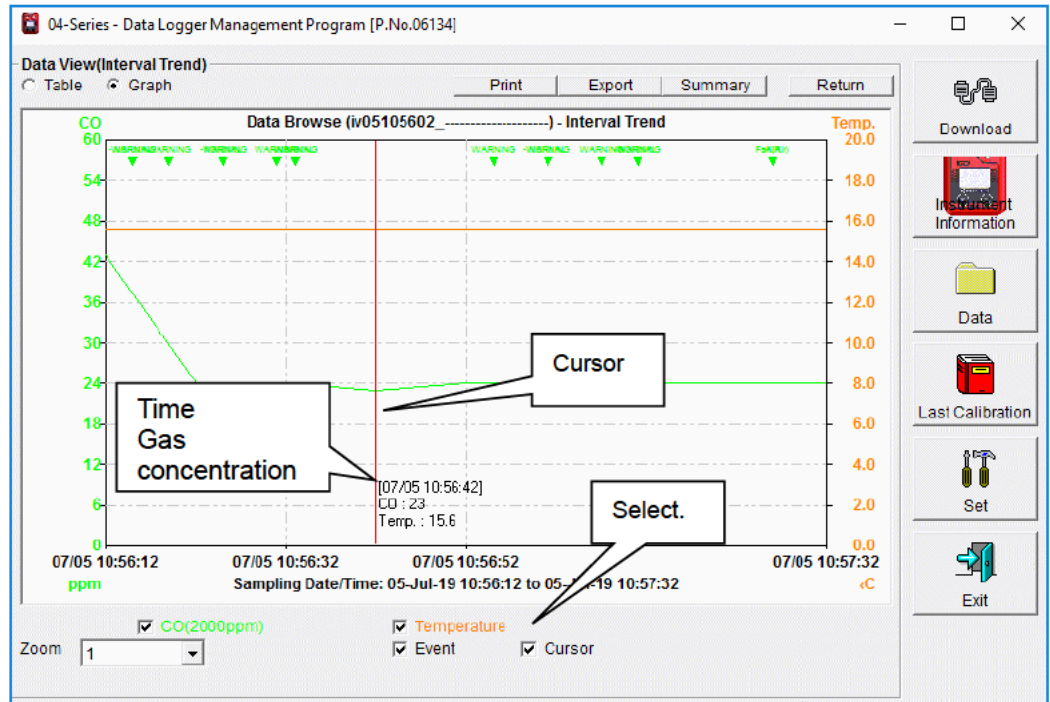


Fail	: Gray	Fault
Warning	: Orange	1st alarm
Alarm	: Red	2nd alarm
AlarmH	: Magenta	3rd alarm
STEL	: Pink	STEL alarm
TWA	: Bright purple	TWA alarm
-*****	: Olive green	Individual alarm reset
Normal	: Dark green	All alarm reset
Over	: Bright red	Full-scale over

⑥ Graph details

● Cursor

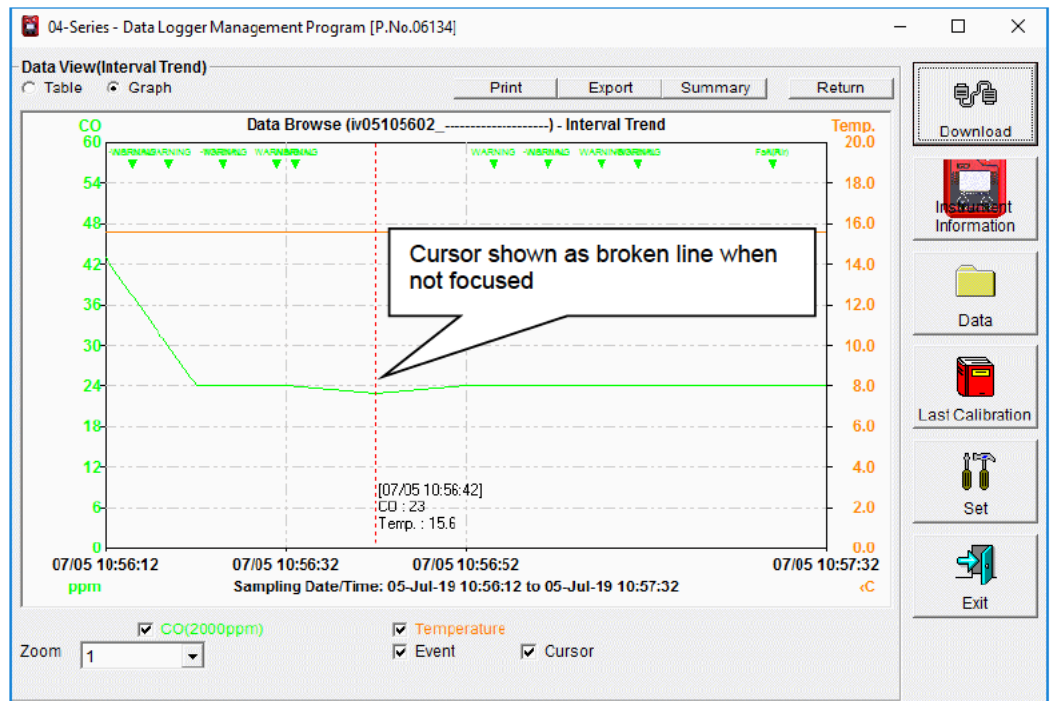
1. Select the "Cursor" checkbox to display the cursor on the graph.



Use the "←" and "→" keys to move the cursor left and right. Use the "↑" and "↓" keys to move the time and concentration display up and down.

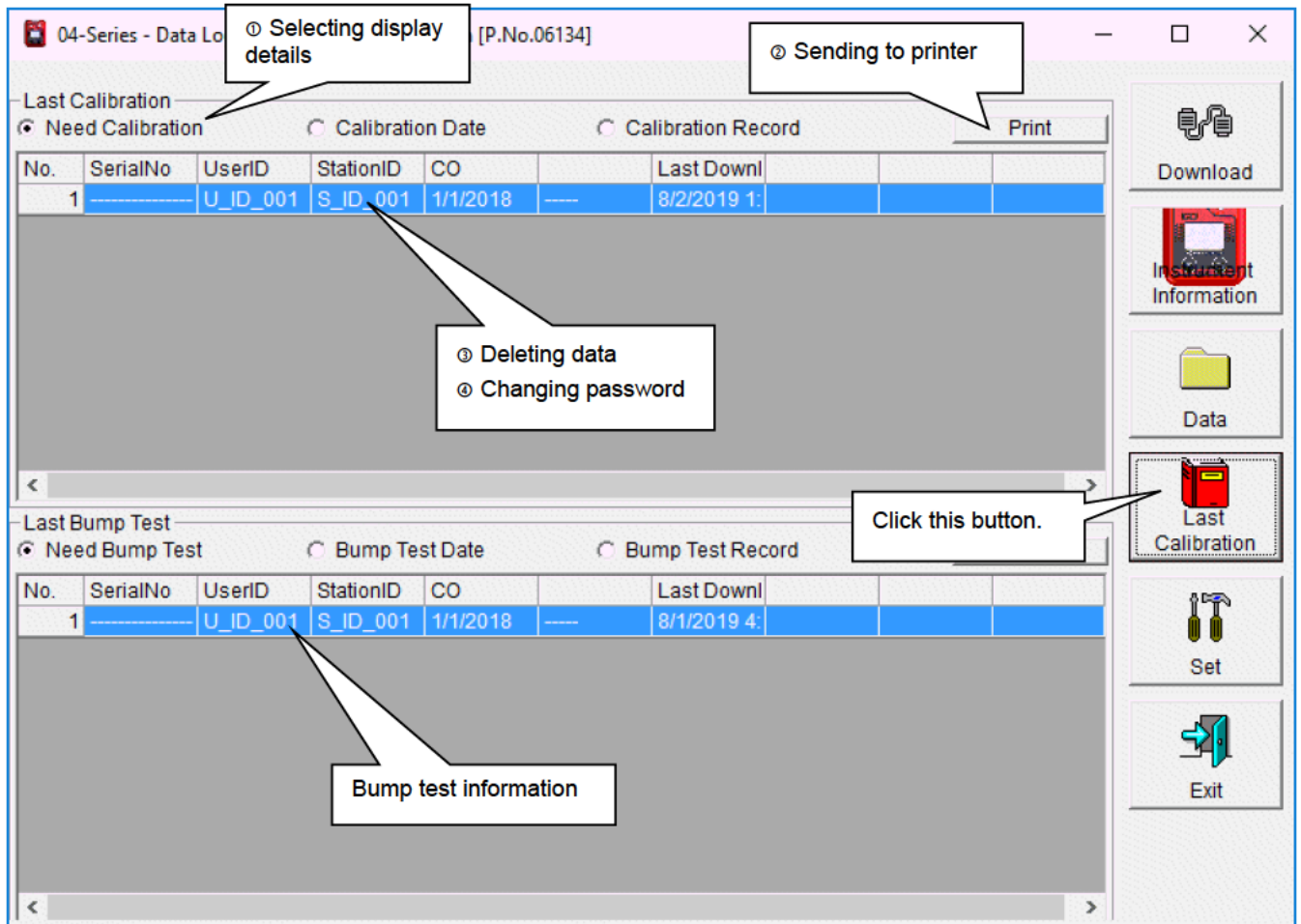
Hold down the "Shift" key at the same time for faster cursor/display movement.

CAUTION: The cursor cannot be moved if a window for another program is opened and the focus is not currently on the graph area. In this case, the cursor appears as a broken line. To return the focus, click anywhere within the graph area.



3-5. Last Calibration screen

This checks for calibration expiration for previously downloaded main unit data. Bump tests are also displayed in the same way.



CAUTION: The table details are read-only and cannot be edited.

① Selecting display details

● Expired data

1. Click the “Need Calibration” radio button.

No.	SerialNo	UserID	StationID	CO	Last Downl
1	-----	U_ID_001	S_ID_001	1/1/2018	8/2/2019 1:

Displays expired calibrations for previously connected 04 Series main units (for which device information data was downloaded).

● List display

1. Click the “Calibration Date” radio button.

No.	SerialNo	UserID	StationID	CO	Last Downl
1	-----	U_ID_001	S_ID_001	1/1/2018	8/2/2019 1:

Lists data for previously connected 04 Series main units. (Only the most recent data is listed for units with the same serial number, user ID, and station ID.)

● Detailed display

1. Click the “Calibration Record” radio button.

No.	SerialNo	UserID	StationID	Gas	Before	After	A.Cal.	Cal.Due(Da)
1	-----	U_ID_001	S_ID_001	CO	0	0	50	Now

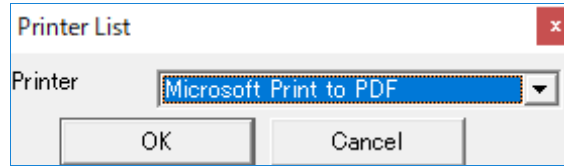
Displays data for previously connected 04 Series main units in the same format as the Instrument Information screen.

For more information on display contents: → Refer to “③ Calibration history information” in “3-2. Instrument Information screen”.

② Sending to printer

- Print

You can print the most recent calibration dates by clicking “Print” after selecting the “Need Calibration” or “Calibration Date” radio button. The printer selection window appears. Select the desired printer and click the “OK” button.



04-Series Data Logger (Last Calibration)

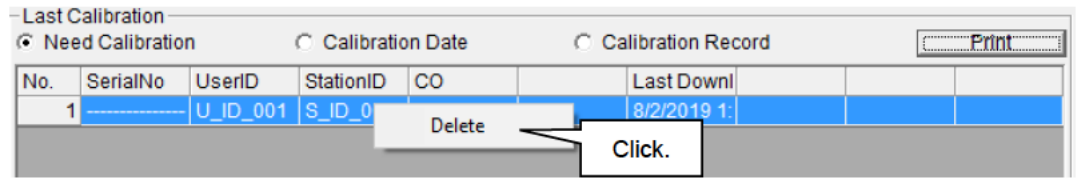
8/2/2019 1:56:51 PM

No.	SerialNo	UserID	StationID	CO	Last Download
1		U_ID_001	S_ID_001	1/1/2018	8/2/2019 1:21:08 PM

③ Deleting data

● Delete

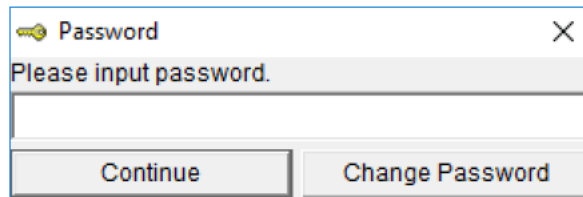
1. Right-click on the data to delete.



CAUTION: Only data shown in the “Need Calibration” and “Calibration Date” displays can be deleted.
Data cannot be deleted in the “Calibration Record” display.

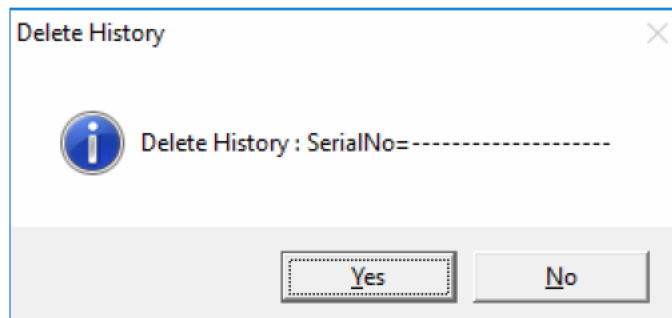
● Password input

1. Clicking the “Delete” button displays a password entry dialog. Enter the password, then click the “Continue” button.



CAUTION: Clicking the “Continue” button without entering a password will cancel the deletion.

2. The following message will appear when you enter the correct password and click the “Continue” button:



Click the “Yes” button to delete the data.

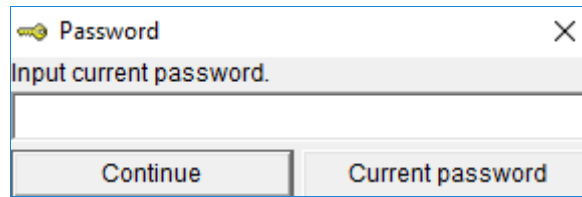
Click the “No” button to cancel data deletion.

CAUTION: The default password immediately after installation is “Riken” (not case sensitive). To learn how to change the password, refer to “3-5. ④ Changing password”.

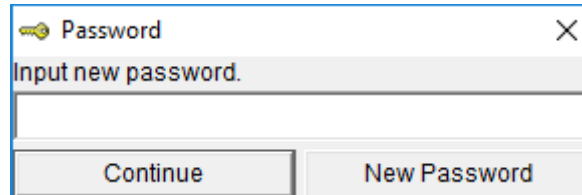
④ Changing password

● Password input

1. Open the password dialog in the same way as for data deletion, then click the “Change Password” button.



2. Enter the correct password, then click the “Current password” button. The following message appears:



3. Enter the new password here, then click the “New Password” button.

4. The password dialog will appear once again. Enter the same (new) password, then click the “New Password” button.

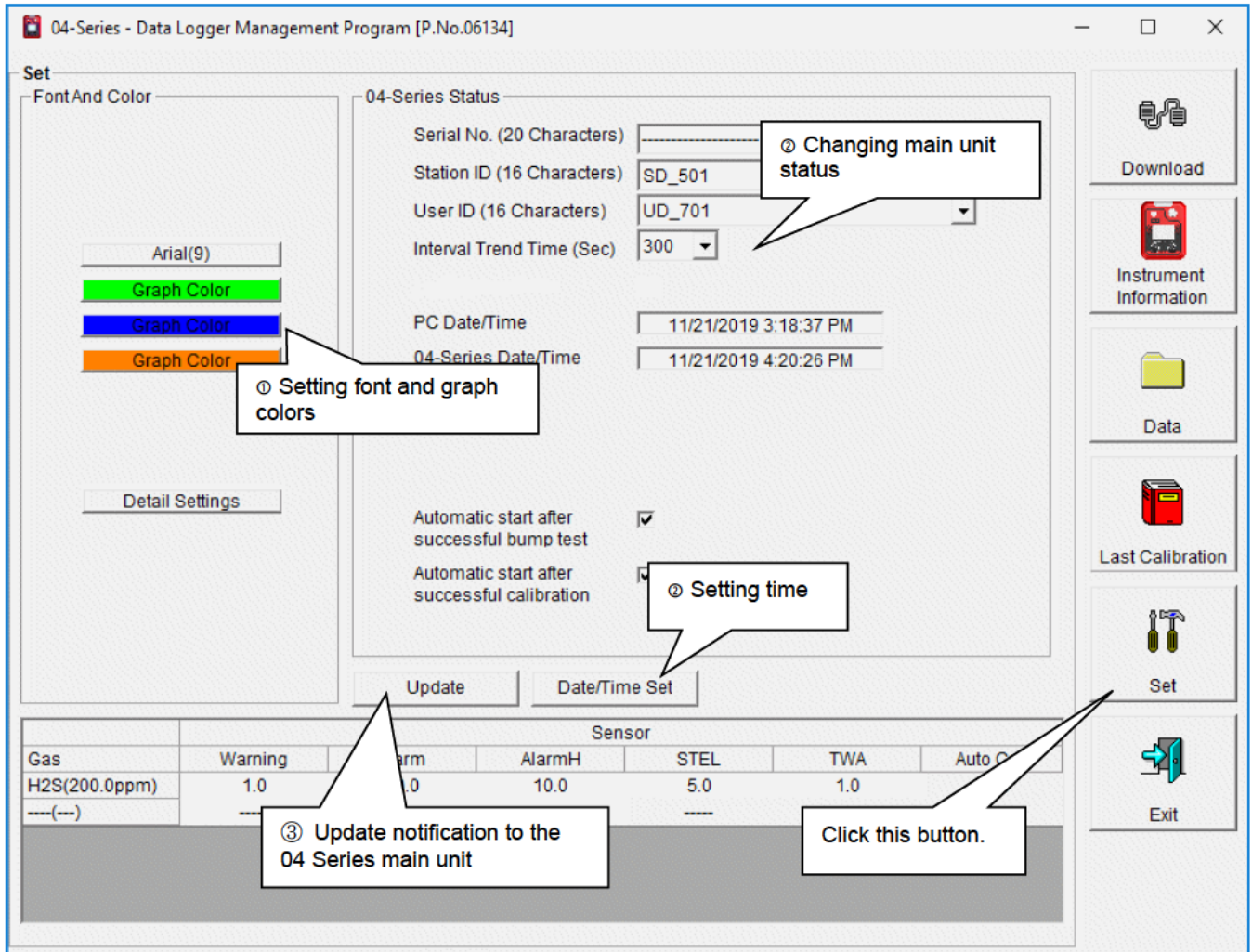


Lastly, click “OK” to update to the new password.

CAUTION: The default password immediately after installation is “Riken” (not case sensitive).

3-6. Set screen

This screen is used to configure screen display settings and main unit status settings.



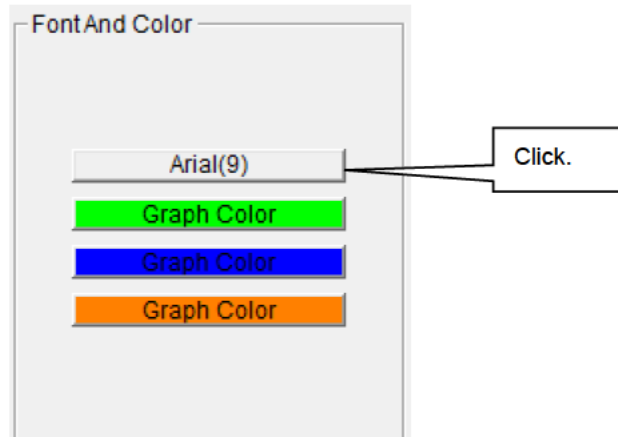
CAUTION: Data that has been set or changed must be sent to the 04 Series main unit by clicking the “Update” button.

CAUTION: Font settings will be applied from the next time the program is started.

① Setting font and graph colors

● Change font

1. Click the font button.



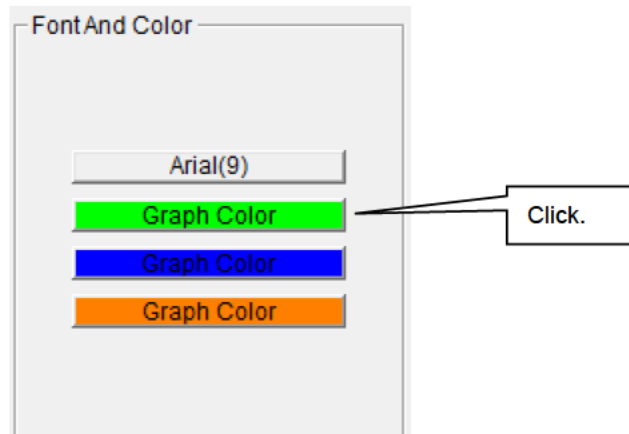
Set the desired font in the font setting dialog that appears.

CAUTION: The screen display may be hard to read if you use an excessively large font.
Changes made here will be applied from the next time the program is started.

● Change graph color

The display colors for each gas on the graph can be changed.

1. Click the "Graph Color" button for a gas.

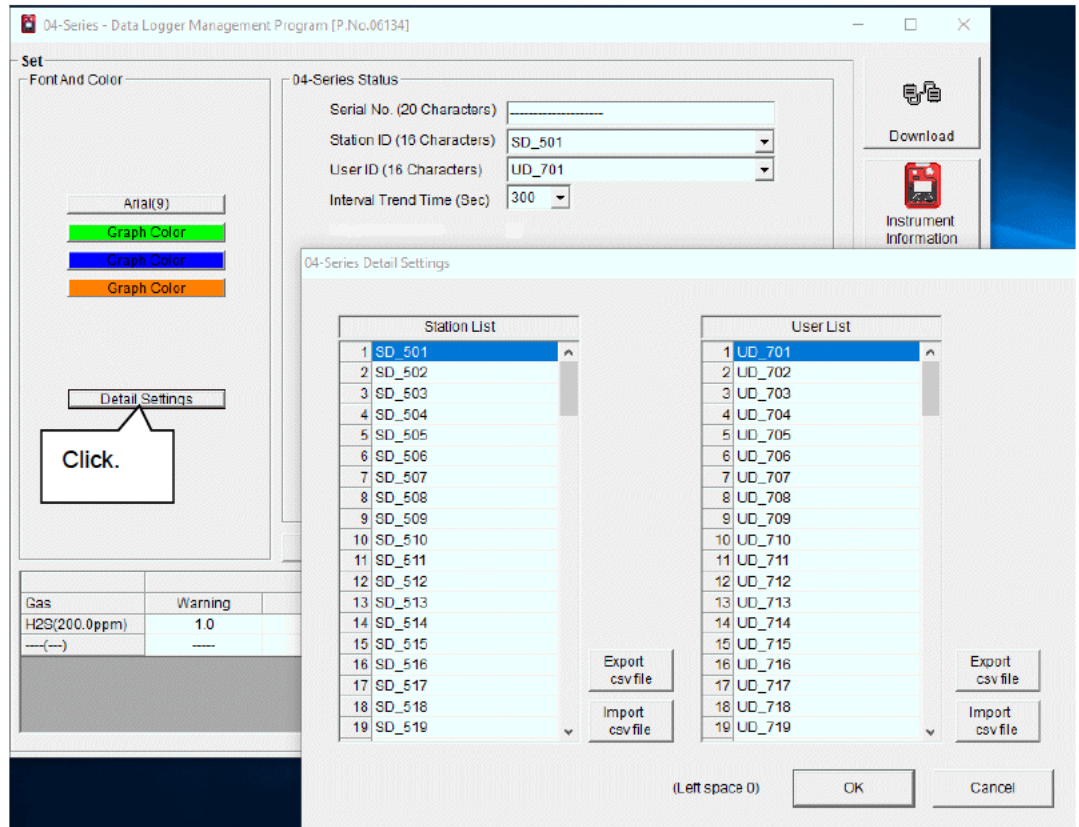


Select the desired color in the color selection dialog that appears.

● Edit station ID and user ID lists

1. The station ID and user ID lists can be edited.

Click “Detail Settings”.



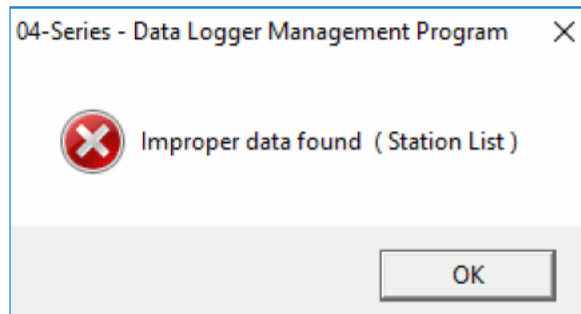
An edit dialog appears. The station list can contain up to 128 entries.

You can use up to 16 alphanumeric characters, including the space, hyphen, and slash symbols.

Export csv file: Outputs to a file. Creates a text file containing the number and data entries.

Import csv file: Imports from a text file containing number and data entries. The background color will appear in red for entries with unsupported characters or too many characters.

* **OK** is disabled if any entries have a red background.



② Changing main unit status

- Edit

1. Edit data in the status area as required.

You can edit details for “Serial No.” (up to 20 digits).

Select from the pull-down list to edit “Interval Trend Time”, “Station ID”, and “User ID”.

Enable or disable “Automatic start after successful bump test” and “Automatic start after successful calibration”.

Click the “Date/Time Set” button to synchronize the PC time (“PC Date/Time”) with the 04 Series main unit internal clock (“04 Series Date/Time”).

CAUTION: Dates and times cannot be entered directly into the date/time boxes.

CAUTION: Apart from clock setting, changing the status data here alone will not update the same data in the 04 Series main unit. Be sure to click “Update” to update the changes in the main unit.

③ Update notification to the 04 Series main unit

- Update notification

1. Click the “Update” button after making changes.

Click the “Yes” button to transfer and save the changes to the 04 Series main unit.

Click the “No” button to cancel update notification.

CAUTION: Once changed, details cannot be restored. If update notification has not yet been made, you can restore the main unit information by clicking the “Instrument Information” button on the “Download” screen to download the device information data.

4. Data Maintenance

Depending on how the program is used—for example, if data is read in several times a day—the number of data samples may increase resulting in longer data search times. Unforeseen problems with the PC may also lead to loss of valuable data.

We recommend backing up data periodically to protect against such circumstances.

4-1. Data storage configuration details

Data is stored in the installed 04-Series program folder.

- 1) File name : GP04.mdb
File type : Microsoft JET 3.6 database file

- 2) File name : Data
File type : Folder. Individual trend data files are saved to individual year and month folders.

4-2. Backing up

Depending on the system configuration, we recommend copying data to a separate hard disk drive or external auxiliary storage device (for example, MO or CD-R).

When restoring data, copy the data to the location to which the 04-Series executable file is saved. This will allow data to be searched and viewed when the program is started.

5. Usage Precautions

Note the following precautions when using this program:

- ① Confirm that the 04 Series is in a suitable location for receiving data. Normal communication is not possible if it is not in a suitable location.
- ② Avoid using similar functions on other applications at the same time when data is being received. (For example, using infrared communication with other applications while data is being received)
- ③ Do not force-quit this program. (For example, using the Ctrl + Alt + Del operation) The program shutdown processing saves configuration parameters for the next time the program starts. Force-quitting the program may cause problems the next time the program starts.
- ④ Do not directly rewrite data files.

6. Troubleshooting

Symptoms	Cause	Corrective action
Communication is not possible.	The main unit is not in a suitable location. Obstacles are in the way.	Reposition the main unit.
	Other devices using infrared are present.	Turn off the other devices or take other measures to prevent interference.
An error occurs during communication.	Disturbance light is present.	Remove any other devices that use infrared.
	The 04 Series main unit moved during communication.	Make sure the main unit does not move during communication.
The communication data is erroneous.	Disturbance light is present.	Remove any other devices that use infrared.

If the problems persist even after taking the action described here, please contact Riken Keiki.

7. IrDA Specifications

7-1. Infrared communication

Infrared communication (IrDA protocol) is used for communicating with the main unit.

Check to confirm the PC being used supports infrared communication.

Ensure a direct line of sight between the PC communication port and the infrared communication port on the main unit. Remove any other sources of light interference.

CAUTION: This program can communicate with the 04 Series main unit only in environments that support IrDA. Check to confirm that the PC being used has a built-in IrDA device that is currently available. A commercially available IrDA USB adapter is required if you use a PC that lacks a built-in IrDA device (for example, most desktop PCs and some laptop PCs).

8. File Organization

Details of the files present when the program is installed and the files present during operation are provided below.

8-1. Current directory immediately after installation

File name	Details
GP04.exe RklrDA11.ocx Filemove.avi	04 Series program Infrared communication component Animation file used during data reception

8-2. Current directory during operation

File name	Details
GP04.exe RklrDA11.ocx Filemove.avi	04 Series program Infrared communication component Animation file used during data reception
GP04.ini GP04.dat GP04.mdb Data Serial.log	04 Series initial setup file Data downloading file Database file (Microsoft Jet 3.6 database) Directory for saving trend data files Record of communication port details since the program was started (for investigation/maintenance use)

CAUTION: The files and directories listed below the double line are created after the program is started.

9. Software Function Specifications

Product name (Program name)	04 Series data logger management program
Product model	SW-04
Executable file name	GP04.EXE
Compatible operating systems	Microsoft Corporation Windows 7 Windows 8 Windows 10
Program size	Main program approx. 3 MB; libraries approx. 5.2 MB (Uses up to 40 MB of hard disk space during installation.)
Communication with main unit	Infrared (IrDA 1.1 protocol) compliant method Standard communication settings Baud rate: 115200 bps (upper limit) Data bits: 8 bits Stop bit: 1 bit Parity: Even
Transmission time	Max. approx. 3 minutes (for maximum number of data samples and standard communication settings)
Medium	CD-ROM ×1
Package contents	Operating manual (this document) Product warranty registration card User license agreement

Revision history

Issue	Revision	Issue date
0	First issue	5/15/2020