PT0E-2210

RIKEN KEIKI

Portable Gas Detector

GX-6100

Configuration Program

MT-GX-6100

Operating Manual

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Contents

1

About This Document

1-1 Introduction

This operating manual describes program operating procedures and specifications. It provides information essential to correct use of the product.
Make sure you have read and fully understood the contents of this manual before using the program.
Keep this operating manual on hand to allow ready reference during use.
The contents of this manual are subject to change without notice to allow program improvements. Any duplication or reproduction of this manual without permission is prohibited, whether in whole or in part.

This software program is used to check and edit the internal settings of the GX-6100 Portable Gas Detector.
See also the following instruction manuals:
Portable Gas Detector GX-6100 Operating Manual (PT0E-238)

The product should be used only by fully-trained personnel.
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 operating manual.

This operating manual omits descriptions of basic operations like command selection and dialog box settings for Microsoft Windows 10 and Microsoft Windows 11. If you are using Windows for the first time, read the Windows manual and familiarize yourself with basic Windows operations before proceeding.

1-2 About program

This software program is used to check and edit the internal settings of the GX-6100 Portable Gas Detector.

- Unauthorized reprinting or reproduction of the contents of this document in part or in whole is strictly prohibited, unless otherwise stipulated by law.
- The contents of this document are subject to change without notice to allow product improvements.
- The user must accept the separately provided Software License Agreement before using this product. Opening the product package constitutes consent to the terms of the license agreement.
- Use this software solely for the intended purpose. Modifying the software or using the software in a manner departing from this manual may affect product safety and quality.
  RIKEN KEIKI rejects all liability for any incidents or damages arising from failure to observe the warnings indicated above.

Microsoft Windows 10 and Microsoft Windows 11 are registered trademarks of Microsoft Corporation in the US and other countries.

1-3 DANGER, WARNING, and NOTE

This operating manual uses the following categories to indicate potential damage/hazards if the user disregards the information provided and uses the product incorrectly:

 **DANGER**	This indicates situations in which improper handling may result in fatal or serious injury or significant property damage.
 **WARNING**	This indicates situations in which improper handling may result in serious injury or significant property damage.
 **CAUTION**	This indicates situations in which improper handling may result in minor injury or minor property damage.

Additionally, usage recommendations are indicated as follows:

NOTE	This indicates items that will be helpful to know when using the product.

2

Installing and Uninstalling

2-1 Operating environment and precautions

This program is compatible with the Microsoft Windows 10 and Microsoft Windows 11 operating systems. The program is not compatible with other operating systems.
This program requires up to approximately 5 MB of free hard disk space to install. It may require additional space, depending on the number of data items. Make sure sufficient disk space is available.

2-2 PC settings

This program uses a virtual COM port of the PC with a dedicated IrDACOM adapter using a USB to UART bridge controller.
The USB to UART bridge controller used is the Silicon Laboratories CP2102N.

[Serial port settings]
Baud rate: 921,600 bps, Data: 8 bits, Parity: None, Stop bit: 1

[Obtaining the driver]
Download the P210x USB Virtual COM Port (VCP) from the Silicon Laboratories website (see below) and install the driver.

Japanese site: https://jp.silabs.com/developers/usb-to-uart-bridge-vcp-drivers
English site: https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers

2-3 Installing the software

Install this program on the PC to be used. Proceed as follows:

1. Download the ZIP file (GX-6100 Series Configuration Program (MT-GX-6100)) from the product information page on the RIKEN KEIKI Co., Ltd. website.
2. Double-click on the “setup.exe” file in the ZIP file.

2-4 Installation procedure

2-4-1 Launch setup

The installation screen will appear after setup.exe is launched.

⇒ Click the [Next] button. To abort the installation, click [Cancel].

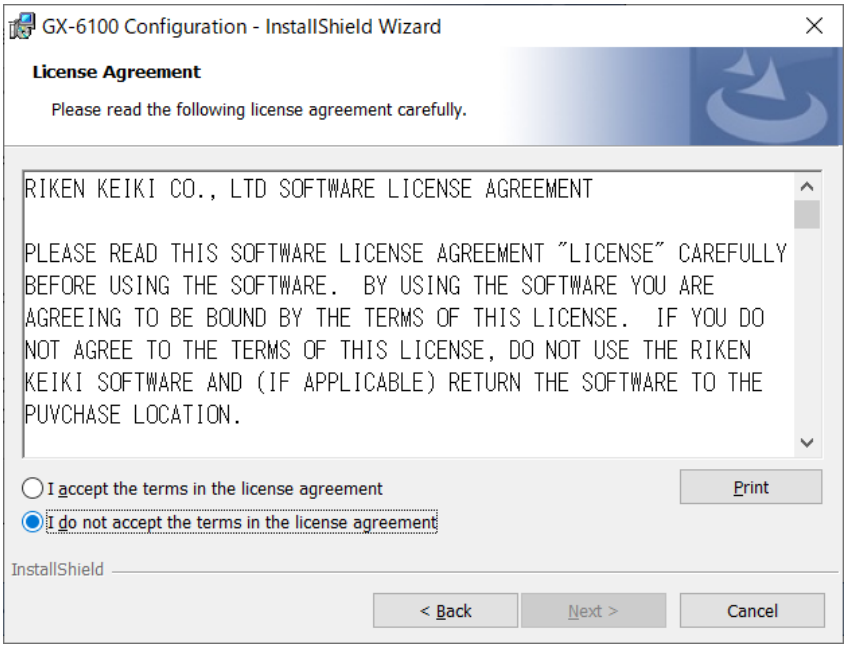
NOTE

- Make sure you have read and fully understand the terms of the software license agreement before installing the software.
- Installation precautions
  This software requires libraries for various drivers for the Windows system. Installing the software automatically initiates the processing required to incorporate these libraries. However, you will be asked to install system libraries with administrator privileges. Follow the instructions displayed to 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. Administrator privileges are required only if the necessary libraries are not present in the system folder.)

2-4-2 Accept license agreement

The license agreement screen is displayed.

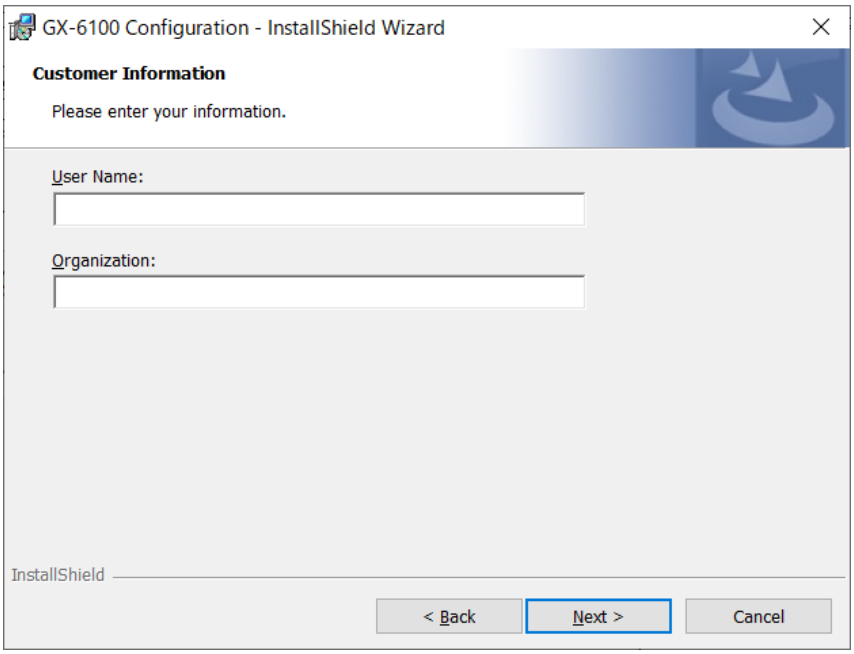
⇒Consent to the license agreement by selecting the corresponding radio button and click [Next] to install the software. To abort the installation, click [Cancel].
To go back and review the previous page, click [Back].



2-4-3 User information

A screen is displayed for entering user information.

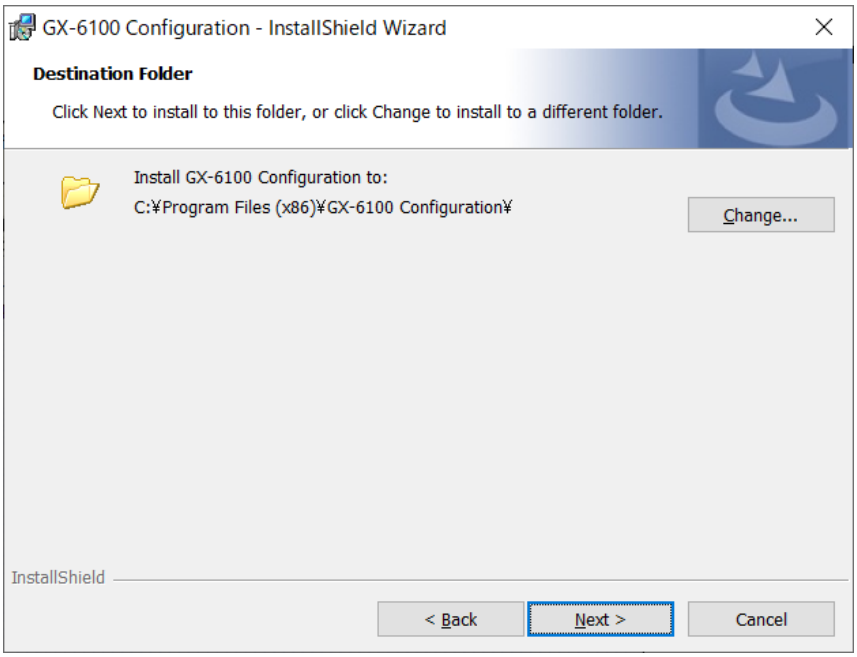
⇒Enter the required details and click [Next] to install the software. To abort the installation, click [Cancel].
To go back and review the previous page, click [Back].



2-4-4 Installation destination folder

The installation destination folder is displayed. (To change the folder, click [Change] and specify another folder.)

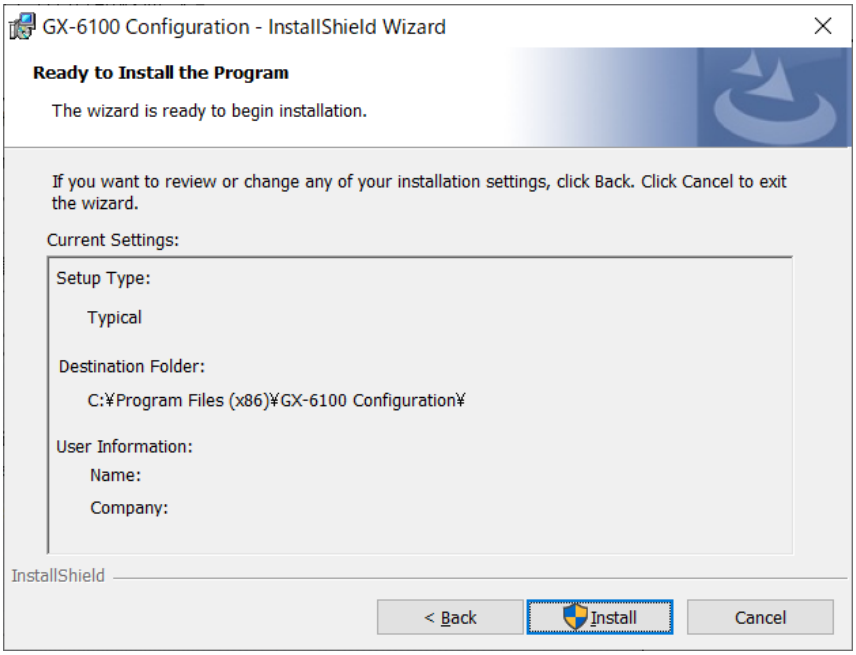
⇒To install the software, click [Next]. To abort the installation, click [Cancel].
To go back and review the previous page, click [Back].



2-4-5 Start setup

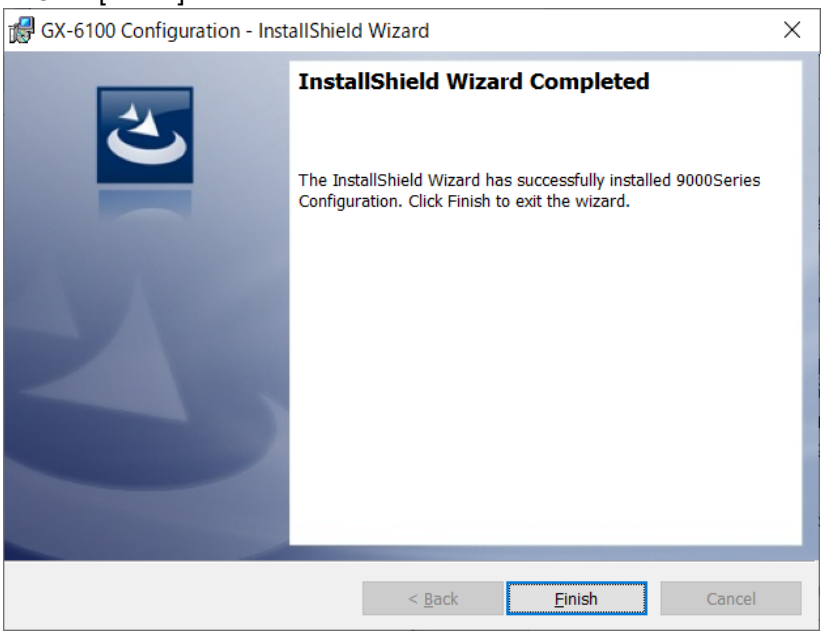
Final confirmation to install the software

⇒To install the software, click [Install]. To abort the installation, click [Cancel].
To go back and review the previous page, click [Back].



2-4-6 Finish

A screen appears indicating that the installation is complete.
⇒Click [Finish] to end the installation.

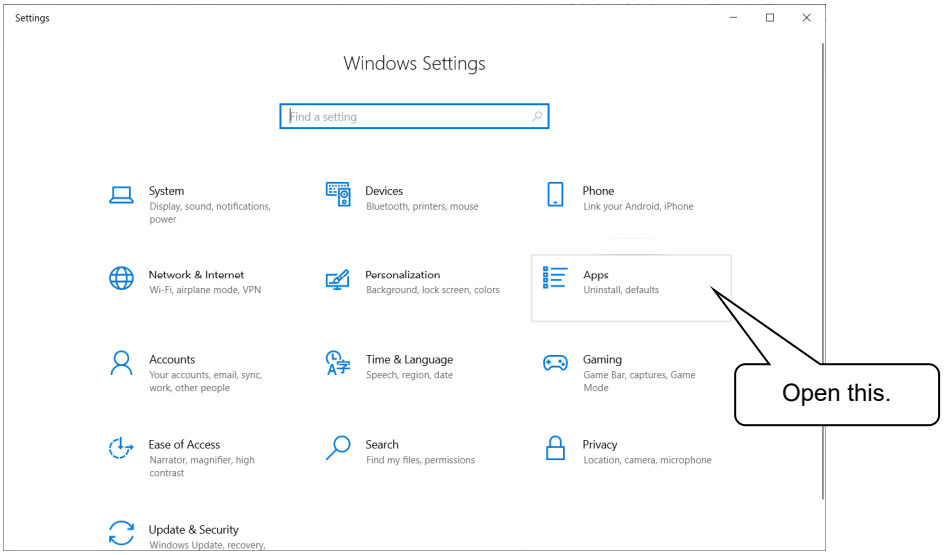


NOTE

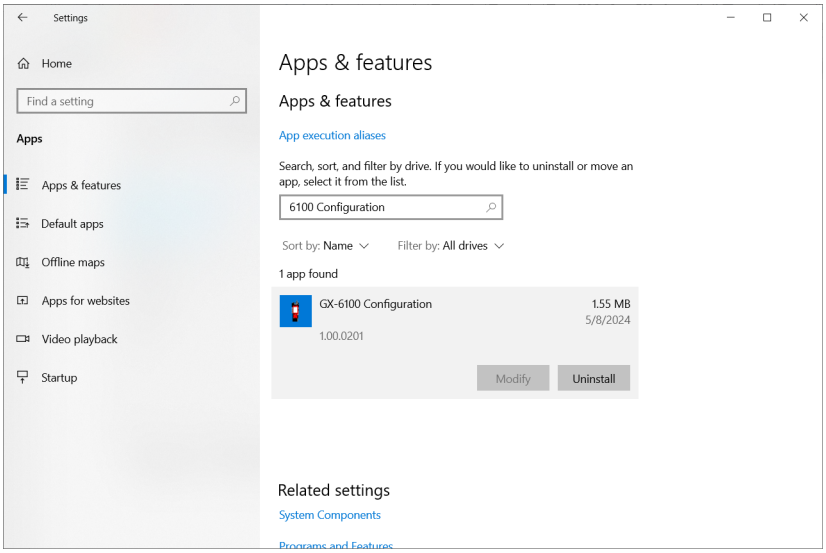
- Make sure you have read and fully understand the terms of the software license agreement before installing the software.
- Saving past data before reinstalling
  Note the following points if reinstalling the program: Uninstall the program before reinstalling. If the program is uninstalled after it has been used, some files may remain undeleted. If you wish to save past data, save these files to another location before deleting the folder.
- Installation precautions
  This software requires libraries for various drivers for the Windows system. Installing the software automatically initiates the processing required to incorporate these libraries. However, you will be asked to install system libraries with administrator privileges. Follow the instructions displayed to 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. Administrator privileges are required only if the necessary libraries are not present in the system folder.)

2-5 Uninstallation procedure

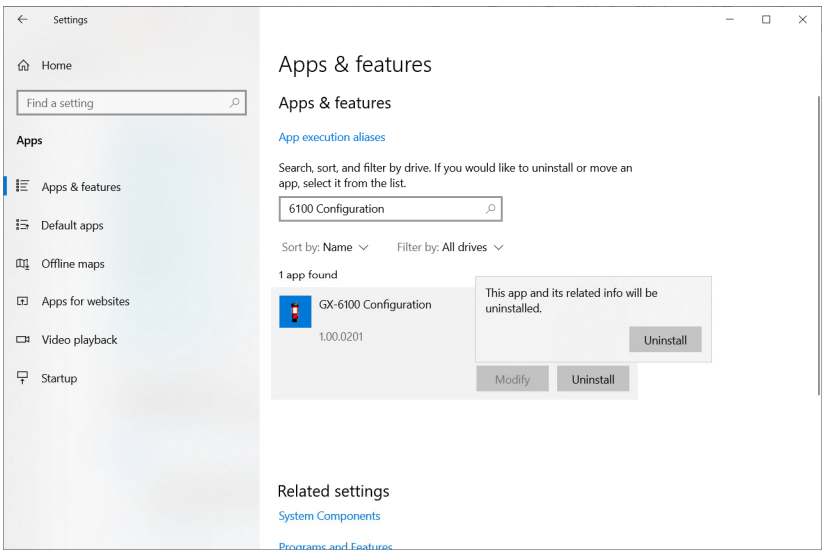
The exact procedure may vary depending on the particular Windows version used. Refer to the user manual for the environment being used (e.g., Windows 10).
To uninstall the software, click [Start] on the taskbar, click [Settings], and launch the Control Panel.



Click to open [Apps] in the Control Panel.
Clicking [Apps] opens the following window:



Click [GX-6100 Configuration].
Click [Uninstall] to display the confirmation window.



Click [Uninstall] again in the confirmation window to begin uninstalling.
* A User Account Control dialog is displayed. Click [Yes].

NOTE

- The message [Do you want to remove the shared file?] may appear during the uninstallation. Select [No]. Selecting [Yes] may affect other applications.

3

Operating Procedures

Launch the program by clicking the [GX-6100 Configuration] shortcut on the desktop or from the Start menu.

3-1 Main unit preparation

1. Connect the gas detector to the PC using infrared communication (IrDA protocol).
2. Enter the startup password (refer to '3-2 Entering the startup password') to launch the software.
3. Place the GX-6100 main unit in a suitable location, start this program, and turn on the power for the main unit. The program will automatically determine whether communication is possible; if so, it will enter reception standby mode.

NOTE

- 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.
- This program is able to communicate with the GX-6100 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. An IrDA USB adapter is required if you are using a PC that lacks a built-in IrDA device (as in cases of most PCs).

3-2 Entering the startup password

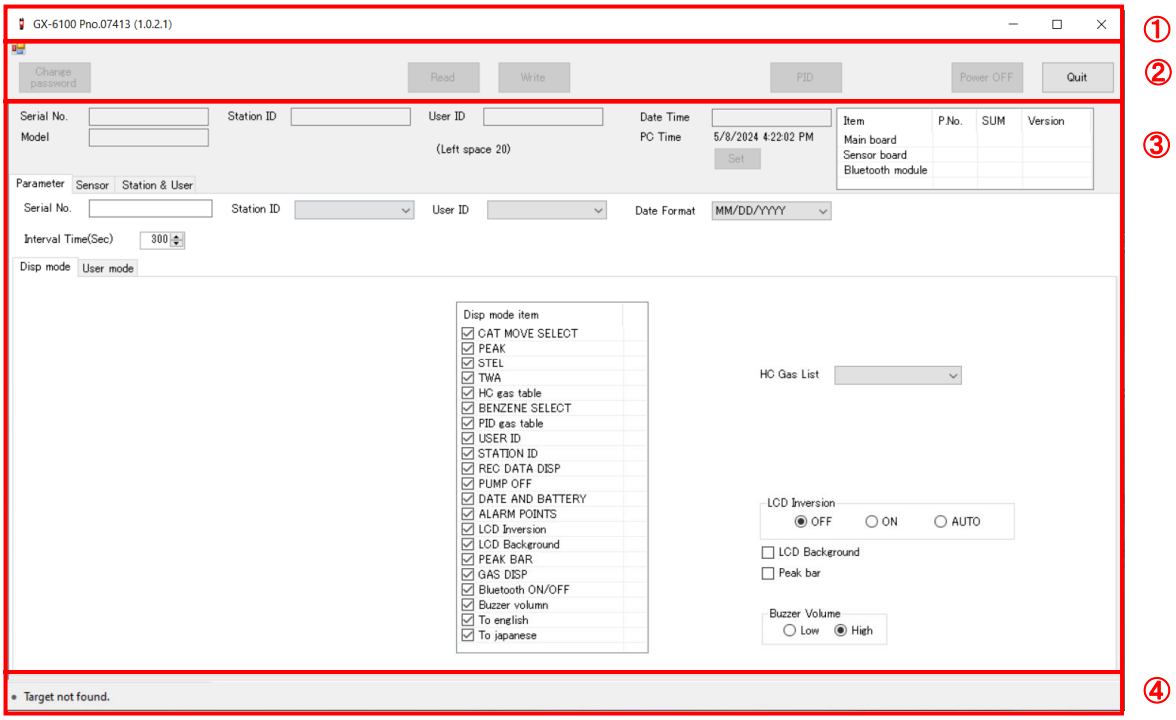
A password must be entered upon the startup of the program. The initial password is 0000.

[OK]: The software will start once the correct password is entered.

[Cancel]: Exits the software.

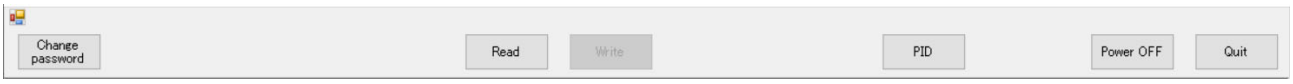
3-3 Main screen

The main screen is displayed once the password has been entered.



No.	Item	Description
①	Title bar	The title bar displays the application name, program number, and version.
②	Control panel	Used to set the password, import or export device information, and configure PID settings
③	Configuration settings	Used to configure various gas detector settings
④	Status	Displays an icon indicating the current connection status together with the connected device name. Not connected to a gas detector: [● Target not found] Connected to a gas detector: [● GX-6100]

3-3-1 Control panel



Item	Description
[Change password]	Changes the password required to launch the software.
[Read]	Imports setting information from the gas detector.
[Write]	Exports setting information to the gas detector.
[PID]	Runs the PID gas list function used to change the PID gas list. (Refer to '3-3-3 PID gas list function'.)
[Power OFF]	Turns off the power to the gas detector.
[Quit]	Exits the software.

1. Change password

Changes the password required to launch the software.

【Display】

The [Change password] button is enabled when a gas detector is connected.

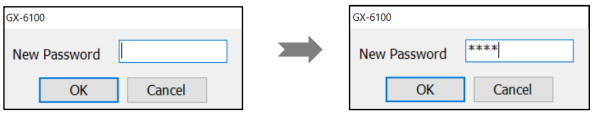
The [Change password] button is grayed out and disabled when no gas detector is connected.

【Operation】

Click the [Change password] button to display the new password input dialog.

You can input single-byte alphanumeric and symbol characters in the input box. Each input character is displayed as “*”.

Before entering password　　While entering password



Enter a new password, then click the [OK] button to update the password and return to the configuration screen.

Clicking the [Cancel] button aborts the process and closes the dialog.

2. Read

Imports setting information from the gas detector.

【Display】

The [Read] button is enabled when a gas detector is connected.

The [Read] button is grayed out and disabled when no gas detector is connected.

【Operation】

Click the [Read] button to start importing status information from the gas detector.

The status bar indicates the progress while the gas detector status is being imported.

The [Cancel] button is displayed on the status bar while the gas detector status is being imported.

Clicking the [Cancel] button while the gas detector status is being imported aborts the status import process.

The progress indicator and [Cancel] button on the status bar will disappear once the gas detector status import is complete.

NOTE

- Depending on the usage environment and the relative locations of the PC and gas detector, communication may be disconnected unexpectedly after settings have been imported. If this occurs, re-import the settings before editing them.

3. Write

Exports setting information to the gas detector. Configuration settings (‘3-3-2 Configuration settings’) and PID settings (‘3-3-3 PID gas list function’) that have been changed will not be reflected on the gas detector until this operation is performed.

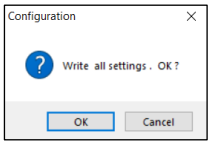
【Display】

The [Write] button is enabled when a gas detector is connected.

The [Write] button is grayed out and disabled when no gas detector is connected or if setting information has not been imported as described in ‘2. Read’.

【Operation】

Click the [Write] button to display the write confirmation dialog.



Click the [OK] button in the write confirmation dialog to start exporting data to the gas detector.
Clicking the [Cancel] button in the write confirmation dialog cancels the export process and closes the dialog.
The status bar indicates the progress while data is being exported.
The [Cancel] button is displayed on the status bar while data is being exported.

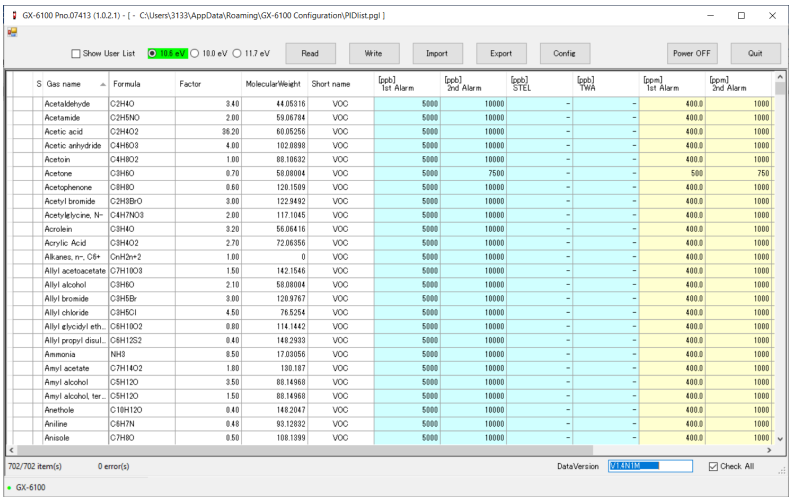
Clicking the [Cancel] button while data is being exported aborts the export process.
The progress indicator and [Cancel] button on the status bar will disappear once the export is complete, and the exit dialog will appear.

NOTE

- After exporting data, click [Read] to confirm the settings have been updated correctly.
- If the connection with the gas detector is lost even for an instant, the [Write] button will be grayed out and the operation will be disabled. If this occurs, repeat the operation from [Read].

4. PID

Activates the PID gas list function used to change the PID gas list (refer to '3-3-3 PID gas list function').



5. Power OFF

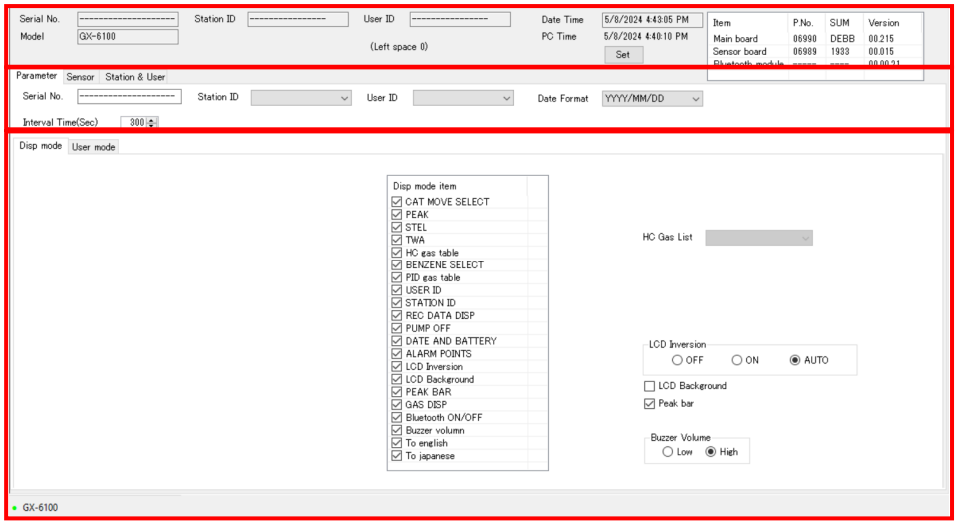
Turns off the power to the gas detector.

6. Quit

Exits the software.

3-3-2 Configuration settings

This is used to configure various gas detector settings.



No.	Item	Description
①	Device status	Displays the gas detector information.
②	Tab 1	[Parameter]: Sets various gas detector settings. [Sensor]: Sets various sensor settings. [Station & User]: Sets the station ID and user ID.
③	Tab 2	[Disp mode]: Sets various settings in display mode. [User mode]: Sets various settings in user mode.

NOTE

- Be sure to connect the gas detector and import data before using the configuration function to change settings.

1. Device status

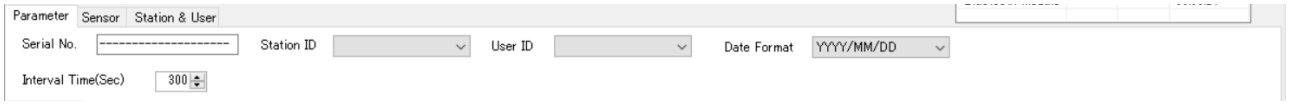
Item	Description
[Serial No.]	Displays the serial number of the imported gas detector.
[Model]	Displays the model of the imported gas detector.
[Station ID]	Displays the station ID of the imported gas detector.
[User ID]	Displays the user ID of the imported gas detector.
[Date Time]	Displays the date and time of the imported gas detector.
[Set]	Synchronizes the date and time of the gas detector with the PC date and time.
Parts information (Main PCB, sensor PCB, etc.)	Displays the program number (five digits), SUM value (four digits), and version (two + three digits). (Parts not in use are indicated by [-] in each column.)

NOTE

- The display is blank until the gas detector data is imported.

2. Tab 1 (Parameter)

Sets various gas detector settings.



Item	Description
[Serial No.]	Input the gas detector serial number.
[Station ID]	Select the gas detector station ID.
[User ID]	Select the gas detector user ID.
[Date Format]	Select the gas detector date format.
[Interval Time(Sec)]	Select the gas detector interval trend measurement cycle.

<Serial No.>

【Display】

Displays the gas detector serial number. (The display is blank until the gas detector data is imported.)

【Operation】

You can input up to 20 single-byte alphanumeric and symbol characters for the serial number.
If the serial number entered is less than 20 characters long, the remaining characters will be filled with half-width spaces.

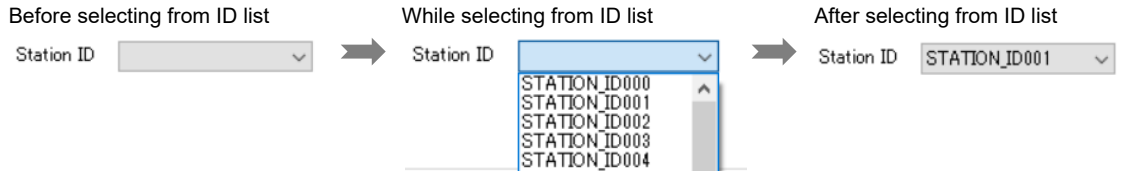
<Station ID>

【Display】

Displays the station ID list imported from the gas detector or from a CSV file. (The display is unselected until the gas detector data is imported.)

【Operation】

Click the drop-down list box after importing ID data to display the list of imported IDs.



Select the desired station ID from the drop-down list.
Clicking outside the drop-down list box while the ID list is displayed cancels the process.

NOTE

- The display is unselected until the station ID list is imported even after the gas detector data has been imported.
- No selection items are displayed until the station ID list is imported, even if you click the drop-down list box.
- For details of how to import the ID list, refer to ‘4. Tab 1 (Station & User)’.

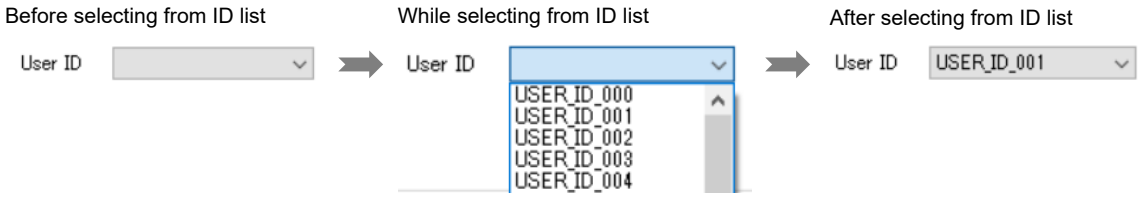
<User ID>

【Display】

Displays the user ID list imported from the gas detector or from a CSV file. (The display is unselected until the gas detector data is imported).

【Operation】

Click the drop-down list box after importing ID data to display the list of imported IDs.



Select the desired user ID from the drop-down list.

Clicking outside the drop-down list box while the ID list is displayed cancels the process.

NOTE

- The display is unselected until the user ID list is imported even after the gas detector data has been imported.
- No selection items are displayed until the user ID list is imported, even if you click the drop-down list box.
- For details of how to import the ID list, refer to '4. Tab 1 (Station & User)'.

<Date Format>

【Display】

Displays the date format for the gas detector. (The display until the gas detector data is imported is [YYYY/MM/DD] for Japanese operating systems and [MM/DD/YYYY] for all other language operating systems.)

【Operation】

Clicking the date format displays the drop-down list. Three settings are available: DD/MM/YYYY, MM/DD/YYYY, and YYYY/MM/DD

Select and click a date format from the drop-down list to change the date format.

Clicking outside the drop-down list box while the date format list is displayed cancels the change.

<Interval Time(Sec)>

【Display】

Displays the gas detector interval trend cycle. (The display is [300] until the gas detector data is imported).

【Operation】

Changing the setting changes the interval trend cycle.

Seven settings are available: 10, 20, 30, 60, 180, 300, and 600

The setting can be altered with the spin buttons or by inputting the value directly.

Entering an invalid value for allowable cycles will change the entry to the nearest setting value.

3. Tab 1 (Sensor)

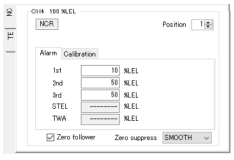
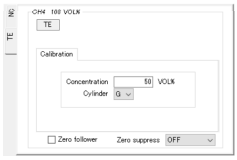
Sets various sensor settings.

Item	Description
[Position]	Select the sensor display position from 1 to 6. The position to set must differ from those set for other sensors.
Gas alarm concentrations	Enter concentrations for the [1st], [2nd], [3rd], [STEL], and [TWA] gas alarms. If no gas alarm setpoint exists, [--------] is displayed. Gas alarm setpoints cannot be enabled for such sensors. Only the [STEL] and [TWA] alarm setpoints can be disabled. Setpoints that have been disabled will appear as [********]. Enter a value to enable an alarm setpoint. * For more information on allowable gas alarm setpoint setting ranges, refer to the operating manual for the gas detector. * To change gas alarm setpoints, delete the current values before entering the new values.
Gas alarm range	Select whether alarm setpoints are set for either [LO] (low) range or [HI] (high) range with double ranges. (Settings are possible only for double ranges.)
[Zero follower]	This lets you enable and disable zero following.
[Zero suppress]	Select [OFF], [CUT], or [SMOOTH] for zero suppression.
Gas adjustment concentration	Enter the gas adjustment concentration.
Gas adjustment cylinder setting	Select the gas adjustment cylinder from A to G.
[Reset alarm point]	Resets the gas alarm setpoints to the factory default values.

NOTE

- The display is blank until the gas detector data is imported.
- The NCR sensor item has both [NC] and [TE] tabs on the left-hand side. The TE sensor can also be set if the corresponding tab is selected.

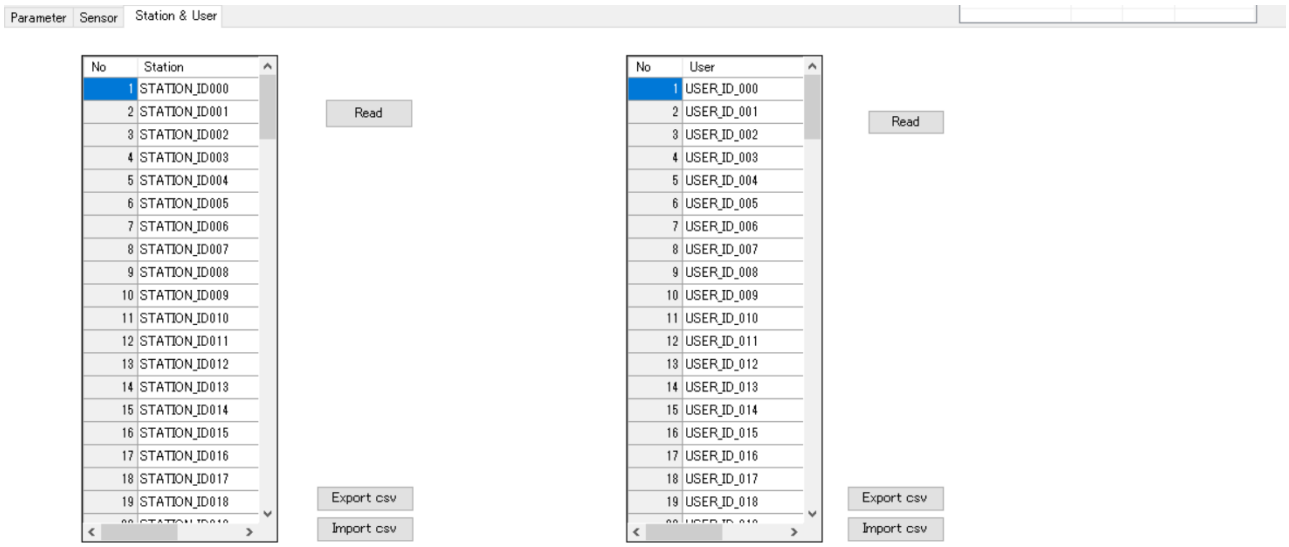
<With NC tab selected> <With TE tab selected> <When corresponding sensor is not installed>


- Gas alarm setpoint reset is disabled if the specifications for the sensor mounted differ from the factory default settings.
  [Failed] will be displayed if you attempt to reset gas alarm setpoints.

4. Tab 1 (Station & User)

Sets the station ID and user ID.



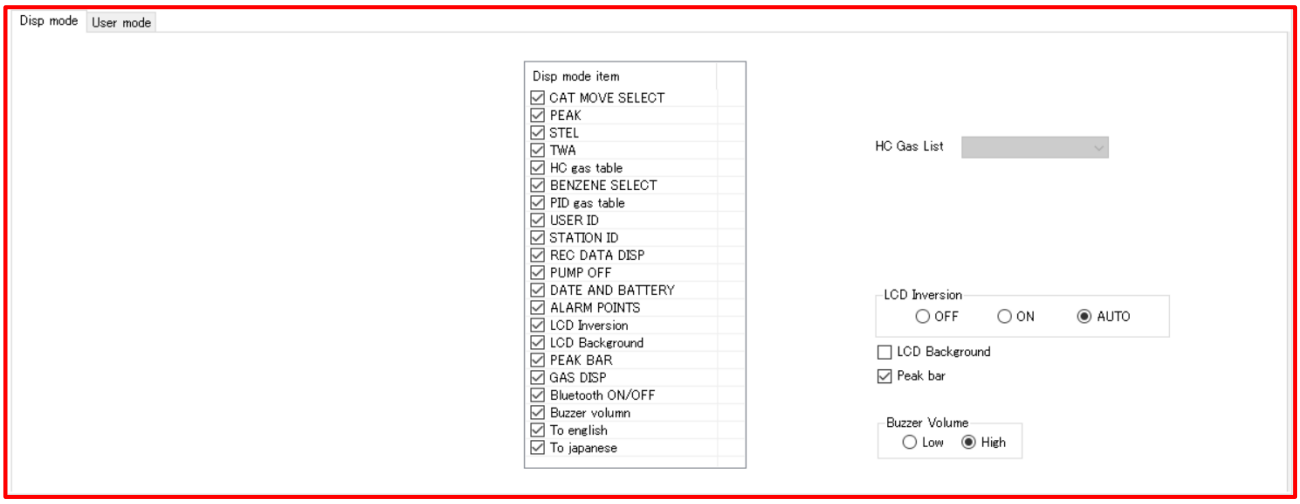
Item	Description
[Read]	Imports list data from the gas detector.
[Export csv]	Saves the displayed list data in CSV format.
[Import csv]	Imports list data in CSV format to alter it.

NOTE

- The [Read] button appears and the [Import csv] button is enabled after gas detector data is imported.
  The ID list appears and the [Export csv] button is enabled after the ID list data is imported.
  (The ID lists and [Read] buttons do not appear and the [Export csv] and [Import csv] buttons are disabled until the gas detector data is imported.)

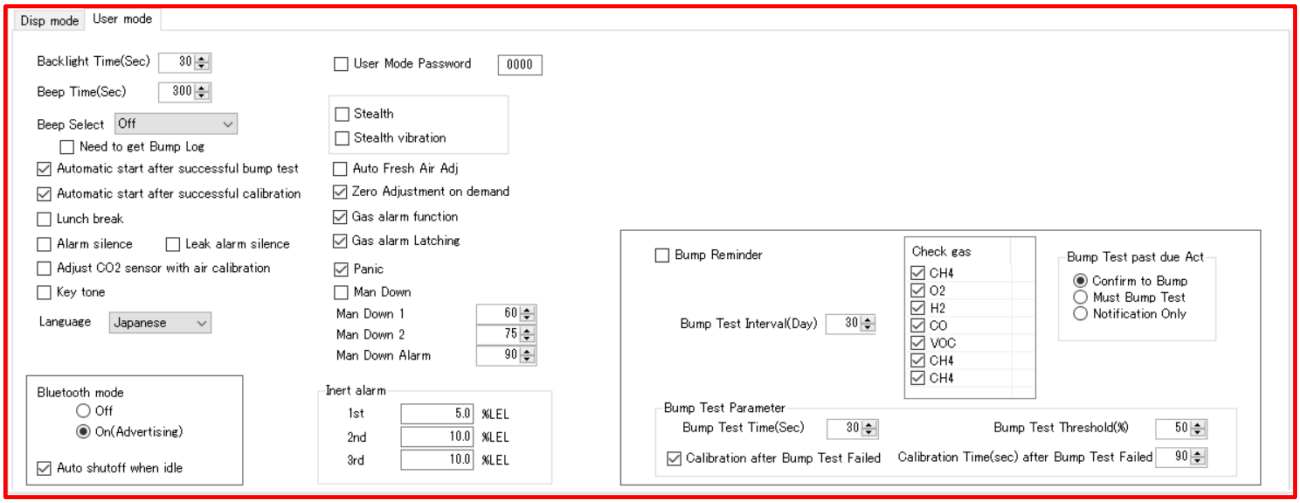
5. Tab 2 (Disp mode)

Sets various settings in display mode.



Item	Description
[Disp mode item]	Toggles the various display mode settings on and off.
[HC Gas List]	This can be altered if an NC sensor is mounted and no TE sensor is mounted. * NC: New ceramic type sensor used for combustible gas %LEL detection * TE: Thermal conductivity type sensor used for combustible gas vol% detection
[LCD Inversion]	Sets the display orientation.
[LCD Background]	Toggles the LCD background inversion on and off.
[Peak bar]	Enables and disables the concentration peak bar display.
[Buzzer Volume]	Switches the buzzer volume between high and low.

6. Tab 2 (User mode)



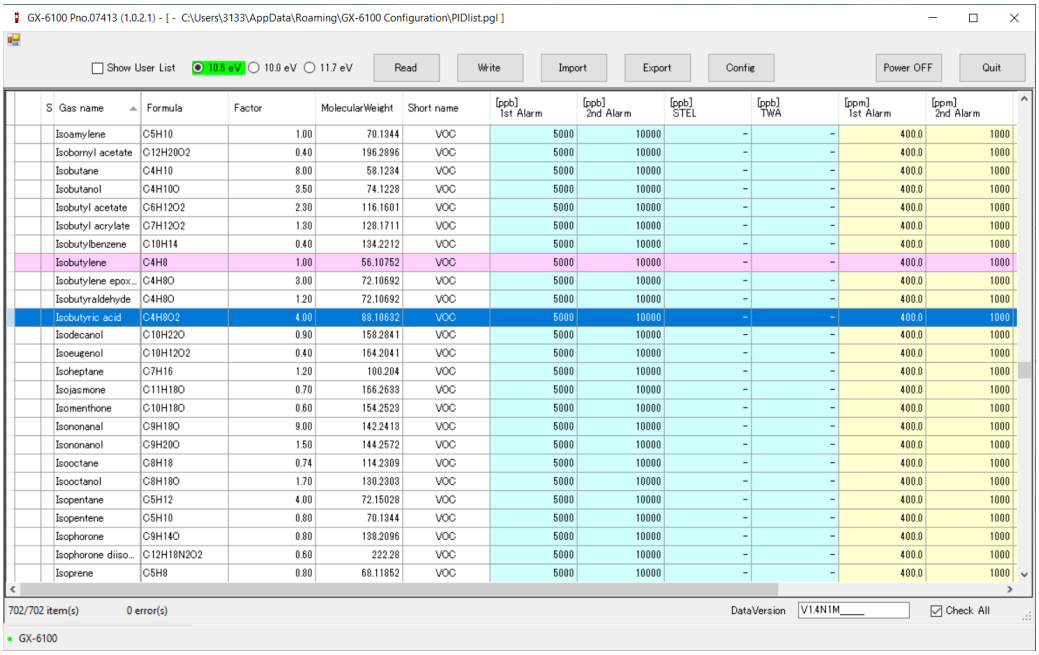
For more information on how to use each item, refer to the operating manual for the gas detector main unit.

Item	Description
[Backlight Time(Sec)]	Select from 0 to 255 seconds.
[Beep Time(Sec)]	Operating interval for the confirmation beep (period for which the backlight is turned on when a key is pressed). Select from 5, 10, 20, 30, 40, 50, 60, 180, 300, 600, 1200, 1800, 2400, 3000, and 3600 seconds.
[Beep Select]	Select from the following: [Off], [LED], [Buzzer], [LED+Buzzer], [Bump/Cal], [Alarm alert], [Bump/Cal/Alarm]
[Need to get Bump Log]	This item is used with the beep operation. Can be toggled on and off. Adds the requirement to download the history using the data logger software when resetting the [Bump/Cal], [Alarm alert], or [Bump/Cal/Alarm] operation.
[Automatic start after successful bump test]	Can be toggled on and off.
[Automatic start after successful calibration]	Can be toggled on and off.
[Lunch break]	Can be toggled on and off.
[Alarm silence]	Can be toggled on and off.
[Leak alarm silence]	Can be toggled on and off.
[Adjust CO2 sensor with air calibration]	Can be toggled on and off.
[Key tone]	Can be toggled on and off.
[User Mode Password]	Toggles the user mode password on and off, and also allows the password to be changed.
[Stealth]	Can be toggled on and off.
[Stealth vibration]	Can be toggled on and off.
[Gas alarm function]	Can be toggled on and off.
[Gas alarm Latching]	Can be toggled on and off.
[Auto Fresh Air Adj]	Can be toggled on and off. When enabled, a dialog appears to confirm whether to perform fresh air adjustment before starting measurement after the gas detector startup operation is complete.
[Zero Adjustment on demand]	Can be toggled on and off.
[Language]	Select from the following: English, Japanese, Italian, Spanish, German, French, Portuguese, Russian, Korean, Chinese (SC), Chinese (TC), Vietnamese, Polish, Turkish, Slovak, Czech
[Bluetooth mode]	Can be toggled [Off] and [On(Advertising)].

[Auto shutoff when idle]	Can be toggled on and off. When enabled, the Bluetooth function is automatically turned off if no communication occurs for five minutes while the function is turned on.
[Panic]	Can be toggled on and off.
[Man Down]	Can be toggled on and off. The detection times (in seconds) can be set in accordance with the following range: 10 (s) <= [Man Down 1] <= [Man Down 2] <= [Man Down Alarm] <= 250 (s)
[Inert alarm]	Used to set oxygen alarm setpoints for inert mode measurement. Set the alarm concentrations within the following range: [1st] <= [2nd] <= [3rd]
[Adjustment expiration display]	Can be toggled on and off. * Displayed on export model gas detectors only.
[Adjustment interval]	Select from 1 to 1,000 days. This is the number of days used to calculate the adjustment expiration date. * Displayed on export model gas detectors only.
[Adjustment target gas selection]	Select the gas types to monitor with the adjustment expiration display function. If the setting is disabled, the set gas types will not be used to determine adjustment expiration. * Displayed on export model gas detectors only.
[Operation after adjustment expiration]	Select from the following: [Use after checking], [Use prohibited], and [Do nothing] * Displayed on export model gas detectors only.
[Bump Reminder]	Can be toggled on and off.
[Bump Test Interval(Day)]	Select from 0 to 365 days. This is the number of days used to calculate the bump test expiration date.
[Check gas]	Select the gas types to monitor with the bump test expiration function. If the setting is disabled, the set gas types will not be used to determine bump test expiration.
[Bump Test past due Act]	Select from the following: [Confirm to Bump], [Must Bump Test], and [Notification Only]
[Bump Test Time(Sec)]	The time until testing starts after bump test starts. Select from 30, 45, 60, and 90 seconds.
[Calibration after Bump Test Failed]	Can be toggled on and off. Sets whether or not calibration is performed automatically if a bump test fails.
[Bump Test Threshold(%)]	This sets the threshold for checking the calibration gas. Select from 10, 20, 30, 40, and 50 %.
[Calibration Time(sec) after Bump test Failed]	The time until adjustment starts after bump test starts. Select 90 or 120 seconds.

3-3-3 PID gas list function

Click [PID] on the control panel to activate the PID gas list function.
Use this function to alter the PID gas list.
The function can be used even when no PID sensor is installed, but the settings will not be reflected in actual operations.



Item	Description
[Import]	Imports PID gas table data from a separate file and updates the gas table data displayed.
[Export]	Outputs the displayed gas table data as a file.
[Config]	Activates the configuration function to alter the gas detector settings (returns to the main screen).
[Show User List]	Displays the user list to edit. The user list makes it easier to select frequently selected gases.
PID sensor type selection	Select a PID sensor type for viewing and editing from [10.6 eV], [10.0 eV], and [11.7 eV]. The LED mounted must be checked and specified.
Table item names	Items including gas names and chemical formulas. Click to resort by item contents.
Gas highlighted in pink	The gas displayed initially when a PID sensor is first mounted The gas displayed initially can be changed by right-clicking and selecting [Set as defaults].
Gas highlighted in blue	The gas currently selected. Double-click or right-click to select [Edit], [Delete], [Set as defaults], [Select for S1], or [Select for S2].
[S] column	[@] is displayed in the [S] column for gases for which conversion is performed using a PID sensor. Select gases by right-clicking [Select gas]. * Enables conversion of the corresponding eV type gas.
Number of items	Displays the number of the gases currently displayed.
[DataVersion]	Displays the PID list version.
[Check All]	Selects all gases in the list. Click with all gases selected to deselect all except the following gases: ・ Default setting gas (gas highlighted in pink) ・ S selection gases (PID sensor conversion gases selected in the [S] column) ・ Isobutylene (calibration gas) ・ Gases set in the user list

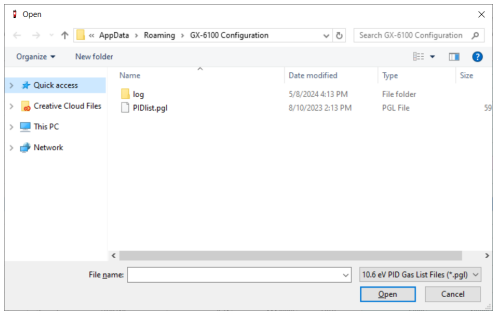
NOTE

- The list displayed before importing contains the values saved to the PC. For this reason, data to be edited inside the gas detector must be imported before entering new settings.

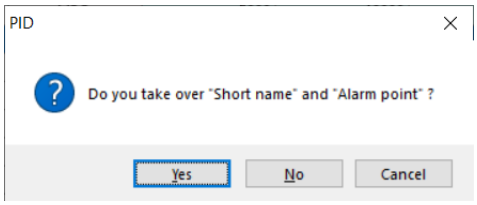
1. Import

Imports gas table data from a separate file and updates the gas table data displayed.

Select the file, then click [Open].



The following confirmation dialog is displayed when updating data:



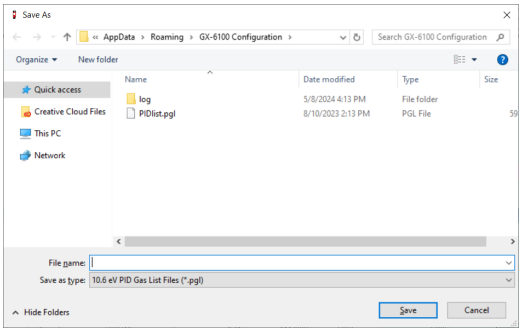
Clicking [Yes] updates the gas table data including abbreviated names and alarm setpoints.

Clicking [No] updates the gas table data not including abbreviated names and alarm setpoints.

Clicking [Cancel] cancels updating the gas table data.

2. Export

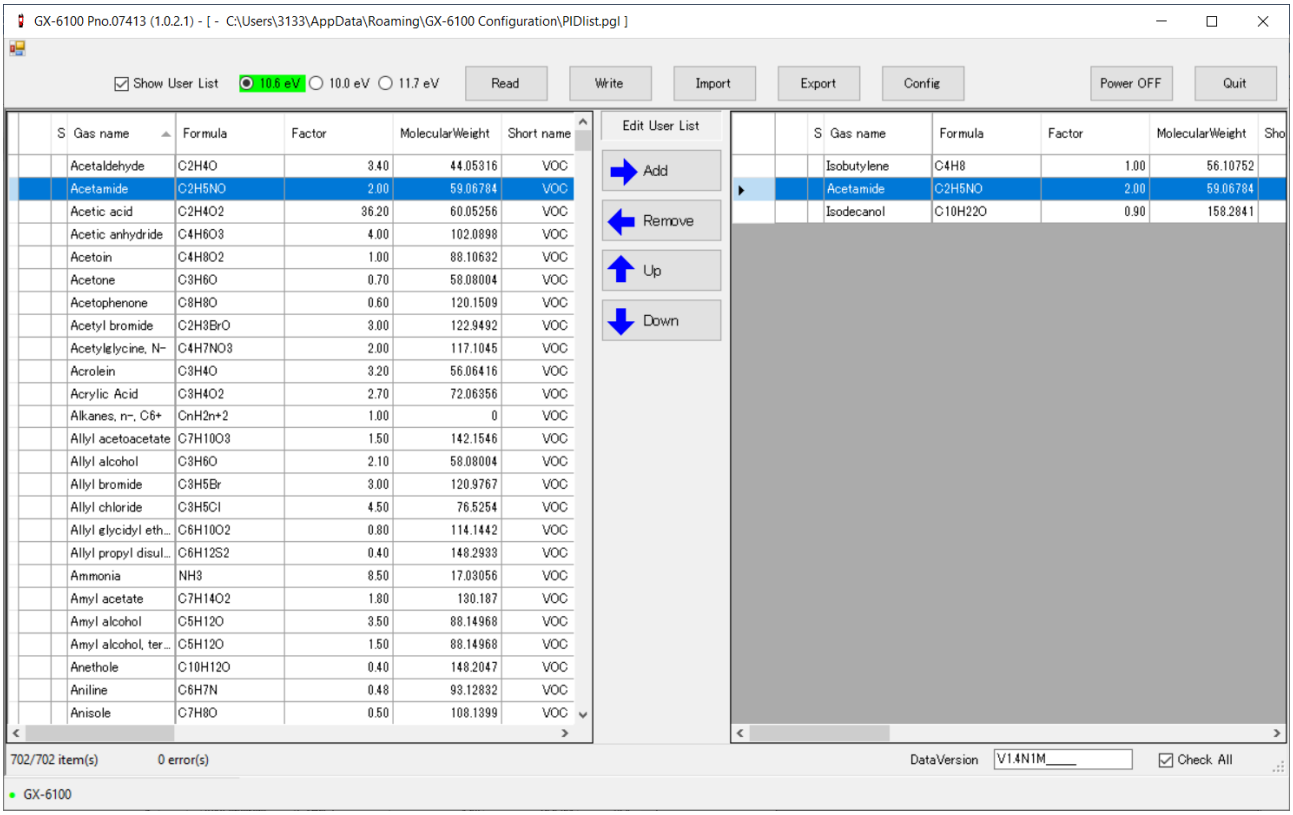
Outputs the displayed gas table data as a file.



3. Show User List

The user list makes it easier to select frequently selected gases. Up to 30 gas types can be set.

Add a check to those gases to be displayed in the user list.



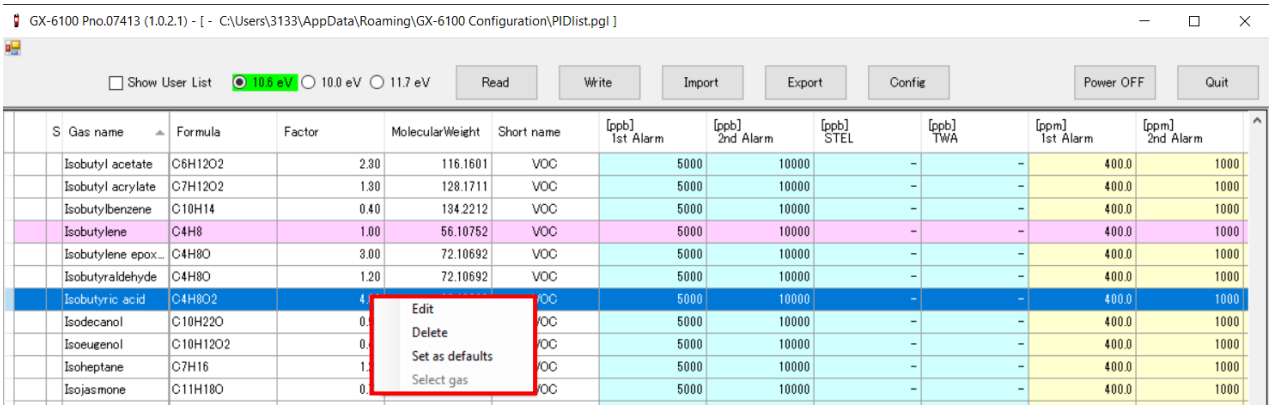
Item	Description
[→ Add]	Select a gas in the gas table data and click [→ Add] to add that gas to the user list.
[← Remove]	Select a gas in the user list and click [← Remove] to delete that gas from the user list.
[↑ Up] / [↓ Down]	Select a gas in the user list and click [↑ Up] or [↓ Down] to move the gas up or down in the user list.

NOTE

- The calibration gas isobutylene is automatically included in the user list and cannot be deleted.

4. Gas highlighted in blue

Double-click/right-click the gas highlighted in blue to perform various operations on that gas.



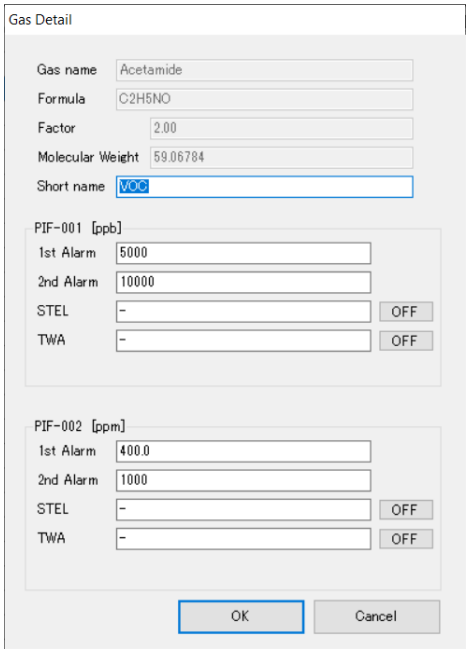
[Edit]	You can edit the gas alarm setpoints and abbreviated name.
[Delete]	You can delete the gas (except the isobutylene calibration gas) from the gas table data.
[Set as defaults]	You can change the gas initially displayed when using the detector (change the gas highlighted in pink).
[Select gas]	Select the gases for which conversion is performed using a PID sensor. [@] is displayed in the [S] column.

Click [Edit] to display the gas details and edit the gas alarm setpoints and abbreviated name.

[Gas name] (cannot be edited)	Displays the gas name.
[Formula] (cannot be edited)	Displays the chemical formula.
[Factor] (cannot be edited)	Displays the calculation coefficient for the gas with respect to the isobutylene calibration gas.
[Molecular Weight] (cannot be edited)	Displays the molecular weight.
[Short name]	Displays the abbreviated name. You can input up to three single-byte alphanumeric characters.
[1st Alarm] [2nd Alarm] [STEL] [TWA]	Displays the alarm concentration. The setting range will be as follows depending on the full scale for each sensor model:

Sensor model	Setting range
PIS-001A	0 - 40,000 ppb
PIS-002A	0 - 4,000 ppm
PIS-003	0 - 100 ppm

Click [OFF] for the [STEL] and [TWA] alarms to display [-] and turn off the corresponding alarms.



4

Usage Precautions

Note the following precautions when using this program:

① Connect using the dedicated IrDACOM adapter for receiving data.
② Avoid using similar functions on other applications at the same time when data is being received.
③ Do not force-quit this program (e.g., 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.

5

Troubleshooting

This troubleshooting section does not address causes of all problems that may occur with the product. It provides brief explanations to assist in determining the causes of common problems.
If you encounter symptoms not addressed here or if problems persist even after taking corrective action, contact RIKEN KEIKI.

Symptom/display	Cause	Action
Communication is not possible.	The main unit is not in a suitable location. Obstacles are in the way.	Confirm that it is correctly connected.
	Other devices using infrared are present.	Turn off the other devices or take other measures to prevent interference.
	The COM port is not recognized.*1	Install the correct driver.
	The driver is out of date.	Install the latest driver version.
	The USB connection is not recognized.	Disconnect and reconnect the USB cable or restart the PC.
	The gas detector is not in communication mode.	Turn the gas detector power off and then back on again.
An error occurs during communication.	Disturbance light is present.	Remove any other devices that use infrared.
	The GX-6100 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.

*1 Launch Device Manager and check to confirm that [Silicon Labs CP210x USB to UART Bridge (COM number)] is displayed for the ports (COM and LPT).
If the problems persist even after taking the action described above, contact RIKEN KEIKI.

6

Software Function Specifications

Product name (Program name)	GX-6100 Configuration Program
Product model	MT-GX-6100
Executable file name	Config6100.exe
Compatible operating systems	Microsoft Corporation Windows 10 Windows 11
Program size	Approx. 2 MB (Uses up to 5 MB of hard disk space during installation.)
Communication conditions	Serial interface (USB to UART) (IrDACOM adapter) Baud rate: 921,600 bps Data bits: 8 bits Stop bit: 1 bit Parity: None
Transmission time	Setting function: Approx. 30 seconds PID function: Approx. 6 minutes

Revision history

Issue	Revision details	Issue date
0	First issue	5/28/2025