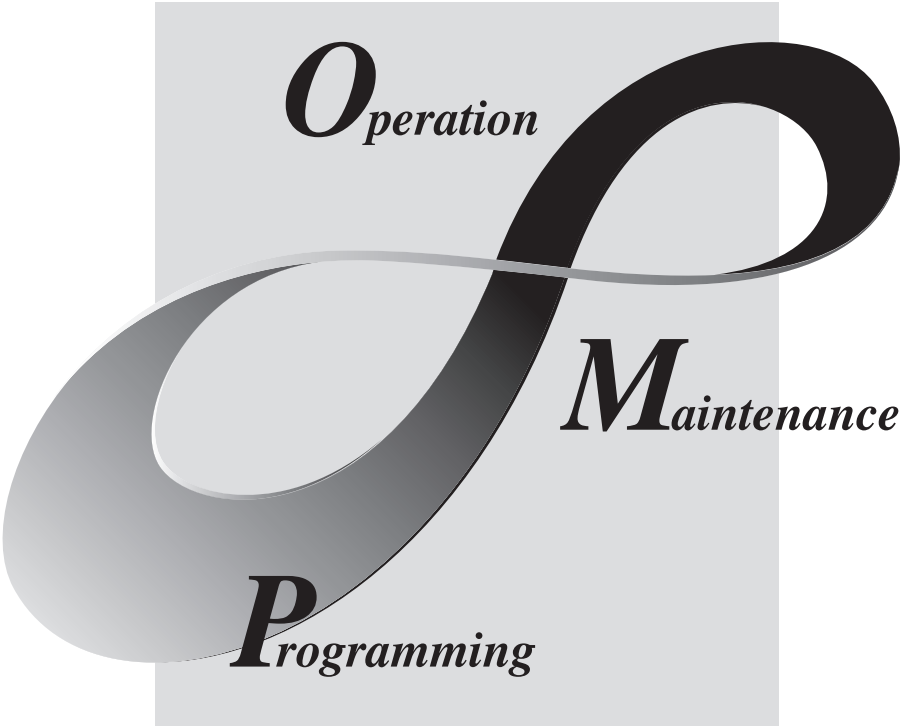
GX Converter Version 1

Operating Manual

MITSUBISHI

MELSOFT



MELSOFT
Integrated FA Software

SW0D5C-CNVW-E

• SAFETY INSTRUCTIONS •

(Always read these instructions before using this equipment.)

When using this product, please thoroughly read this manual as well as GX Developer Operating Manual. Also, please exercise adequate safety precautions and handle the product correctly.

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REVISIONS

* The manual number is given on the bottom left of the back cover.

Print Date	* Manual Number	Revision
Apr., 1999	IB (NA)-0800004-A	First edition.
Jun., 2001	IB (NA)-0800004-B	CNVW corrected to be GX Converter GPPW corrected to be GX Developer [Correction] Chapter 2, Chapter 3 [Deletions] Appendix 5
Sep., 2001	IB (NA)-0800004-C	[Correction] Chapter 3
Feb., 2003	IB (NA)-0800004-D	[Correction] SOFTWARE USER REGISTRATION, INTRODUCTION, CONTENTS, About Manuals, Section 2.1, Chapter 3, Section 3.2
Nov., 2003	IB (NA)-0800004-E	[Correction] Section 5.1, Section 6.3.2
Dec., 2005	IB (NA)-0800004-F	[Correction] Section 2.1, Section 5.1
Jan., 2007	IB (NA)-0800004-G	[Correction] Section 5.1, Section 6.1, Appendix 1
Feb., 2008	IB (NA)-0800004-H	[Correction] About the generic terms and abbreviations used in this manual, Section 2.1, Chapter 3, Section 4.1.1, Section 6.2.2

SH-080122-J

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—— SOFTWARE USER REGISTRATION ——

After agreeing to the terms of the Software License Agreement included in the package, please access the MELFANSweb Home Page (http://www.nagoya.melco.co.jp/) and make a software user registration. (User registration is free of charge.)
You can also make a registration by faxing or mailing the "Software Registration Card" packed with the product.

1. Software Registration
   You can make a software registration by accessing the MELFANSweb Home Page or faxing or mailing the "Software Registration Card" packed with the product.
   After you have made a software registration, we will register the user and send the "Software registration confirmation" together with the user ID.
   We will also provide the latest information, such as the new product release, version upgrade information and event information, by direct mail.

2. Notes on Contact
   Please ask questions concretely and clearly using terms listed in the manual.
   When requesting us to solve a problem, provide us with detailed information for reproducing the problem.
   In addition, contact the respective manufacturers when asking questions about the operating system (OS) or the other vender's software products

User registration is valid only in Japan.

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Usage Precautions

The following describes precautions when using GX Converter.

(1) First, please read the "Safety Precautions."

(2) About installation

The GX Converter start by add-in to GX Developer Version 3 (SW3D5-GPPW-E) or later. Therefore, please install the GX Converter on Personal computer that have GX Developer Version 3 (SW3D5-GPPW-E) or later preinstalled.
The GX Converter cannot be added in to GX Developer Version 2 (SW2D5-GPPW-E) or earlier.

(3) Multithreading communication

There are some cases where the screen will not be properly displayed while using GX Converter due to the lack of system resources.
If this occurs, close GX Converter and then close GX Developer (Programs, Comment, etc.) and other applications, then restart GX Developer and GX Converter.

(4) About CPU types

Depending on type of CPU used for the GX Developer project, there are some cases where Instruction or I/O (Device) cannot be correctly converted during data conversion.
See " GX Developer Operating Manual" for details.

(5) About the file format when TEXT, CSV format files are being read by the GX Developer

The file format is fixed when export List or Device comments to a TEXT, CSV format file.
Therefore, create List or Device comments using commercial software using the file formats specified above as much as possible.

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INTRODUCTION

Thank you for choosing the Mitsubishi MELSOFT Series Integrated FA software.
Read this manual and make sure you understand the functions and performance of MELSOFT series thoroughly in advance to ensure correct use.

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About Manuals

The following manuals are also related to this product.
In necessary, order them by quoting the details in the tables below.

Related Manuals

Manual Name	Manual Number (Model Code)
GX Developer Version 8 Operating Manual This manual contains information on creating programs, printing procedures, monitoring procedures, debugging procedures, and other on-line functions using the GX Developer. (Sold separately)	SH-080373E (13JU41)

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How to read this manual

"How to read this manual" lists the sections in this manual by the objective while using the GX Converter. Please read this manual using the contents below as a reference.

(1) When you want to know the features of GX Converter (Section 1.1)

Section 1.1 describes the features of GX Converter.

(2) When you want to know the structure of GX Converter (Chapter 2)

Chapter 2 describes the operating environment and overall configuration of GX Converter.

(3) When performing Installation and Uninstallation of GX Converter (Chapter 3)

Chapter 3 describes the operating procedures when performing Installation or Uninstallation of GX Converter.

(4) When converting TEXT, CSV format data to GX Developer format data (Chapter 4)

Chapter 4 describes the operating procedures when converting TEXT, CSV format data to GX Developer format data.

(5) When converting GX Developer format data to TEXT, CSV format data (Chapter 5)

Chapter 5 describes the operating procedures when converting GX Developer format data to TEXT, CSV format data.

(6) When you want to know about file formats (Chapter 6)

Section 6.1 describes the TEXT, CSV format file.
Section 6.2 describes how to write the data when TEXT, CSV format data is Import by the GX Developer.
Section 6.3 describes the data types used when export GX Developer format data as TEXT, CSV format data.

(7) When you want to know about limitations and precautions for GX Converter (Appendix 1)

Appendix 1 describes the limitations and precautions when performing Installation, Uninstallation or various types of conversion.

(8) When you want to know about GX Converter conversion error messages (Appendix 2)

Appendix 2 describes the error messages generated during data conversion.

(9) When you want to know about CADIF character-string data conversion (Appendix 3)

Appendix 3 describes the conversion of CADIF character-string data.

(10) When you want to know about the performance specifications for the GX Converter (Appendix 4)

Appendix 4 describes the performance specifications for the GX Converter.

About the generic terms and abbreviations used in this manual

This manual uses the following generic terms and abbreviations to describe the GX Converter unless otherwise specified.

Generic term/abbreviation	Description of generic term/abbreviation
GX Converter	Abbreviation for GX Converter Version 1 (SW0D5C-CNVW-E)
GX Developer	Generic term for GX Developer Version 3 (SW3D5-GPPW-E) or later
GX Developer Version n (SWnD5-GPPW-E) or earlier	When limited to earlier than the major version (n denotes the version number)
GX Developer Version n (SWnD5-GPPW-E) or later	When limited to later than the major version (n denotes the version number)
CADIF character-string data	Abbreviation for the character-string data converted by SW1IVD-CADIF
GX Simulator	Generic term for GX Simulator Version 2 (SW2D5-LLT-E) or later
Windows Vista®	Generic term of Microsoft® Windows Vista® Home Basic Operating System, Microsoft® Windows Vista® Home Premium Operating System, Microsoft® Windows Vista® Business Operating System, Microsoft® Windows Vista® Ultimate Operating System and Microsoft® Windows Vista® Enterprise Operating System
Windows® XP	Generic term of Microsoft® Windows® XP Professional Operating System and Microsoft® Windows® XP Home Edition Operating System

Product Components

The components of this product are shown below.

Type	Product Name	Quantity
SW0D5C-CNVW-E	GX Converter Version 1 (1-license product) (CD-ROM)	1
	End-user softwere license agreement	1
	Software registration Card	1
	License agreement	1
SW0D5C-CNVW-EA	GX Converter Version 1 (Multiple license product) (CD-ROM)	1
	End-user softwere license agreement	1
	Software registration Card	n∗1
	License agreement	1

∗1: The same number of software registration cards as that of licenses are packed with the product.

NOTICES

- We don't guarantee the commercially-available Windows® -based software products that have been introduced in this manual.
- We hold the copyrights of this software package.
- No part of this manual may be transcribed or duplicated in any form without prior permission by Mitsubishi Electric Corporation.
- We have attempted to cover all the revisions of software and hardware, but this manual may not contain the latest revisions.
- The software of this product requires one license to be purchased per computer.
- We permit the user to use this software package (including this manual) based on the Software License Agreement.
- We are not liable for consequences or influences due to this software package (including this manual).
- The specifications of this software package and the descriptions in this manual may be altered in future without prior notice.

1. OVERVIEW

This chapter explains the overview of GX Converter and this manual.
This manual describes the GX Converter, a product capable of converting TEXT, CSV format data into List or Device comments so that the GX Developer can handle, and converting List and Device comments into TEXT, CSV format data.

1.1 Features

(1) Conversion can be processed as a GX Developer function.

Conversion can be performed without closing the GX Developer because it is an add-on function for the GX Developer.

(2) Data can be converted by file.

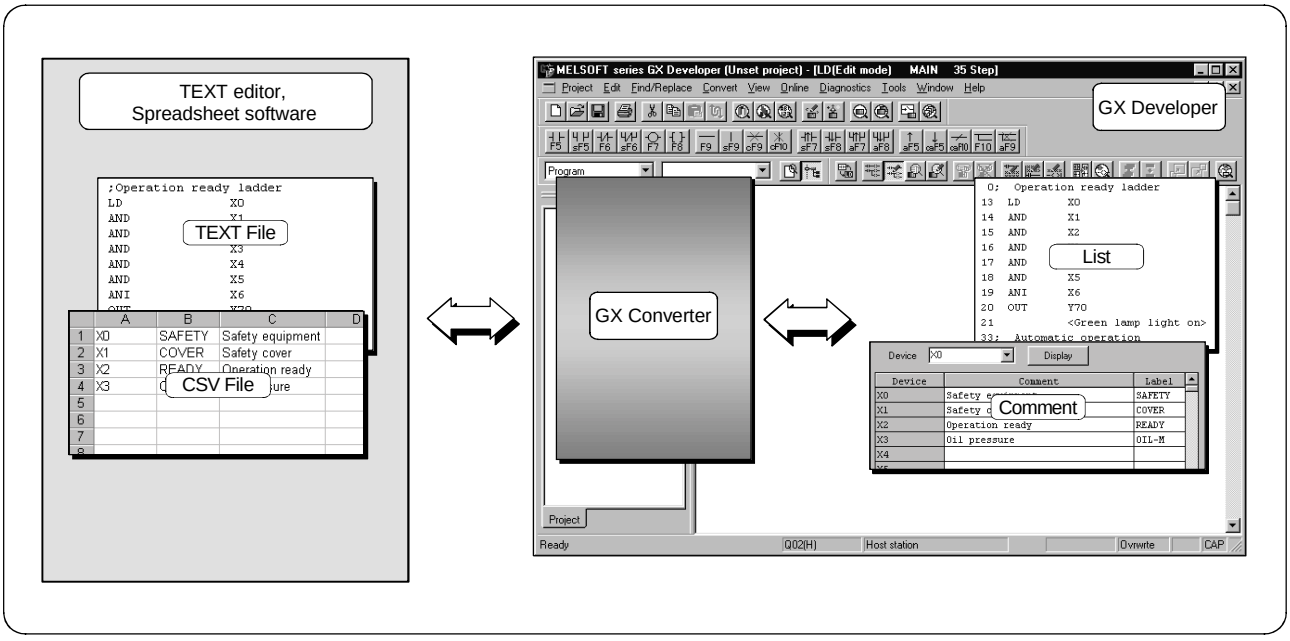
Conversions can be performed between commercial software (TEXT, CSV format data) and the GX Developer (List or Device comments) at the file level. (There is no need for copying and pasting.)

(3) Sequence programs can be created using commercial software.

When a program created using the TEXT,CSV format is converted to a List via GX Converter, it may be used as an actual sequence program.

(4) Data can be created in any file format.

When creating a List or Device Comments using the TEXT,CSV format, the file format can be created freely.



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MEMO

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2. SYSTEM CONFIGURATION AND SPECIFICATIONS

This chapter explains the operating environment and overall configuration of the GX Converter.

2.1 Operating Environment

The operating environment of GX Converter is explained.

Item		Description
Installation (Add-in) destination ∗1		Add-in to GX Developer (SW3D5C-GPPW-E, SW8D5C-GPPW-C or later).
Computer main unit		Personal computer on which Windows® operates.
	CPU	Refer to the following table "Used operating system and performance required for personal computer".
	Required memory	
Free space	For installation	25MB or more
	For operation (Virtual memory) ∗2	10MB or more
Disk drive		CD-ROM disk drive
Display		800 × 600 dot or more resolution (1024 × 768 or higher for Windows Vista®)
Operating system ∗3		Microsoft® Windows® 95 Operating System Microsoft® Windows® 98 Operating System Microsoft® Windows® Millennium Edition Operating System Microsoft® Windows NT® Workstation Operating System Version 4.0 Microsoft® Windows® 2000 Professional Operating System Microsoft® Windows® XP Professional Operating System Microsoft® Windows® XP Home Edition Operating System Microsoft® Windows Vista® Home Basic Operating System Microsoft® Windows Vista® Home Premium Operating System Microsoft® Windows Vista® Business Operating System Microsoft® Windows Vista® Ultimate Operating System Microsoft® Windows Vista® Enterprise Operating System

∗1: GX Converter cannot be installed into GX Developer (SW0D5C-GPPW-E, SW1D5C -GPPW-E, SW2D5C -GPPW-E). GX Converter becomes unusable if the version (SW0D5C -GPPW-E, SW1D5C -GPPW-E, SW2D5C -GPPW-E) of GX Developer (SW2D5C-GPPW-E or earlier) is reinstalled in the environment where GX Converter has already been installed into GX Developer (SW3D5C-GPPW-E or later).

∗2: Free space of at least twice the size of the TEXT, CSV format file that will be read is required in the Windows® temporary drive.

∗3: For details on compatible operating systems, refer to the operating environment of GX Developer.

Used operating system and performance required for personal computer

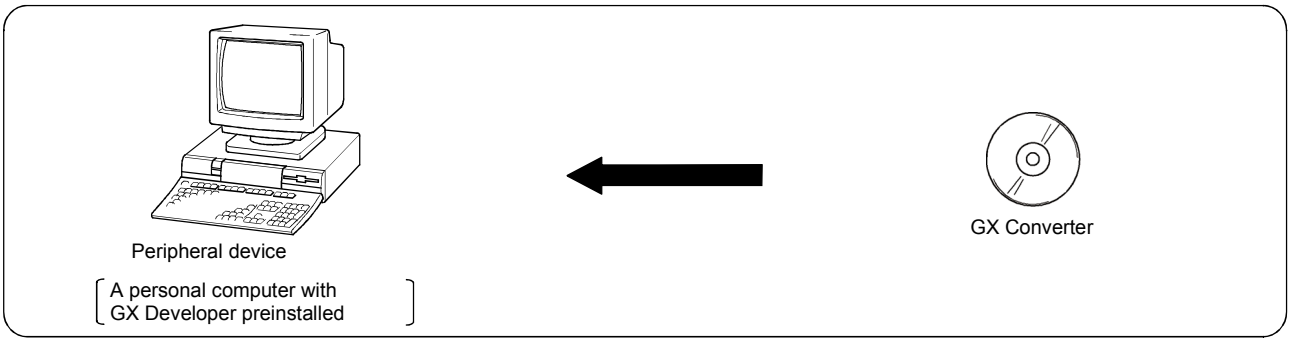
Operating system	Performance Required for Personal Computer	
	CPU	Required memory
Windows® 95	Pentium® 133MHz or more	32MB or more
Windows® 98	Pentium® 133MHz or more	32MB or more
Windows® Me	Pentium® 150MHz or more	32MB or more
Windows NT® Workstation 4.0	Pentium® 133MHz or more	32MB or more
Windows® 2000 Professional	Pentium® 133MHz or more	64MB or more
Windows® XP	Pentium® 300MHz or more	128MB or more
Windows Vista®	Pentium® 1GHz or higher	1GB or more

POINT

- New functions of Windows®
  When Windows® XP or Windows Vista® is used, the following new functions cannot be used.
  If any of the following new functions is used, this product may not operate normally.
  Start of application in Windows® compatible mode
  Fast user switching
  Remote desktop
  Big fonts (Details setting of Screen properties)
  64-bit operating system

2.2 Overall Configuration

This section explains the overall configuration of the GX Converter.



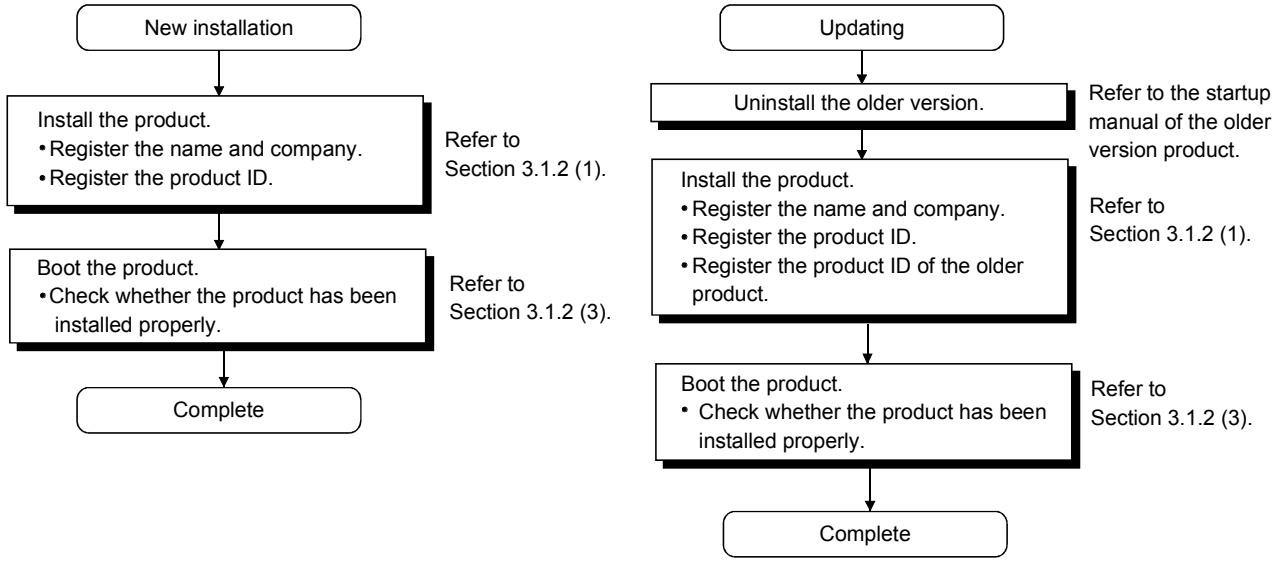
3. INSTALLATION AND UNINSTALLATION

This chapter explains how to install and uninstall the product.

3.1 Installation

3.1.1 Installing Procedure

Install GX Converter in the following procedure.



POINT

If the DLL overwrite confirmation message appears during installation, choose "Yes" to overwrite the DLLs.
If they are not overwritten, the product may not be run properly.

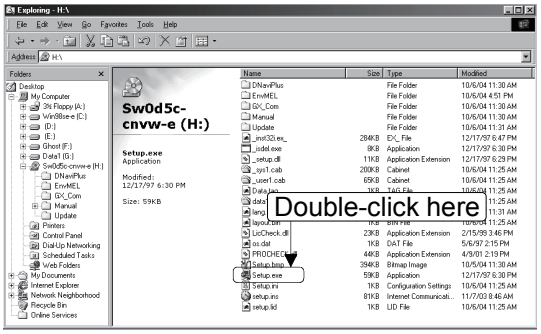
3.1.2 Installing Operation

Before starting installation, confirm the following.

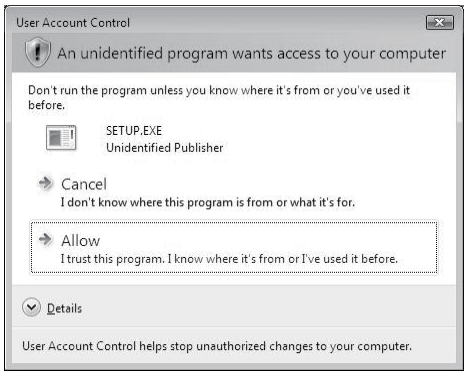
POINT

- Terminate all the other applications running under Microsoft® Windows® Operating System before installation.
- The installer may not work normally because the update program of operating system or other companies' software such as Windows Update and java update may start automatically. Please install the driver after changing the setting of the update program not to start automatically.
- When using Windows NT® Workstation Operating System Version 4.0, Microsoft® Windows® 2000 Professional Operating System, Windows® XP, Windows Vista® , logon as a user who has the attributes of an Administrator (for computer management).
- Install GX Developer (SW3D5C-GPPW-E, SW8D5C-GPPW-C or later) first before installing GX Converter.
- If the license key FD is valid, installing this product enables updating. (The license volume of the older version decreases by 1 license.)

(1) Installing the product
(The screens of Windows® 98 are used in the explanation.)



1) Start Windows® Explorer and click the drive in which the disk has been inserted.
Double-click "Setup.exe".
On Windows® Explorer, choose [Start]-[Programs]-[Windows Explorer].
∗: When user account control is enabled in Windows Vista® , the following screen appears.
Click "Allow".



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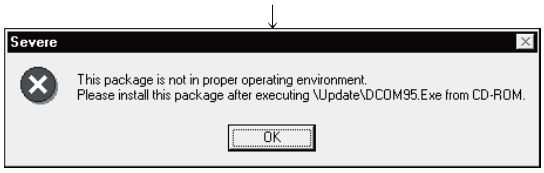
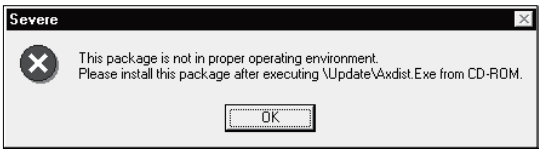
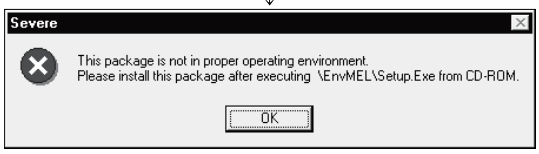
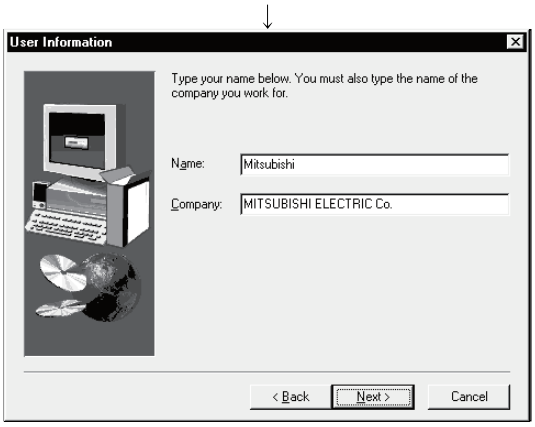


2) If either of the left screens appears, perform operation in accordance with the instructions given in (a) in "(2) When message appears at start of installation".
After the operation is over, restart installation operation.



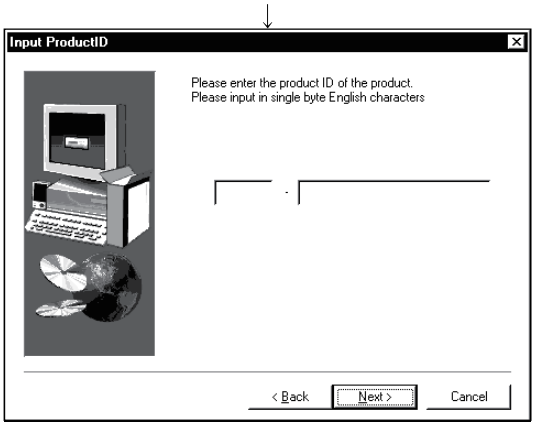


If the left screen appears, perform operation in accordance with the instructions given in (b) in "(2) When message appears a start of installation".
After the operation is over, restart installation operation.



3) Type the name and company, and click Next>.

As the confirmation dialog box appears, perform operation in accordance with the message.



4) Type the product ID and click Next>.

The product ID is described in "Software User Registration Card" included with the product.

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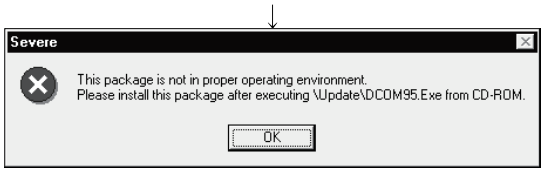
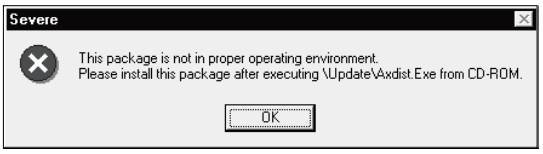
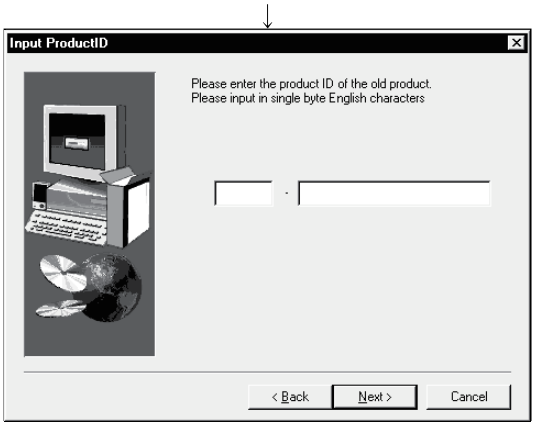




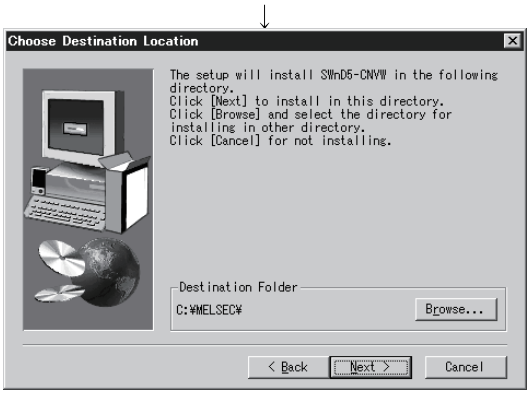
5) If either of the left screens appears, perform operation in accordance with the instructions given in (a) in "(2) When message appears at start of installation".
After the operation is over, restart installation operation.



6) When the product is to be updated, the screen shown on the left appears. Type the product ID of the older product and click Next> .

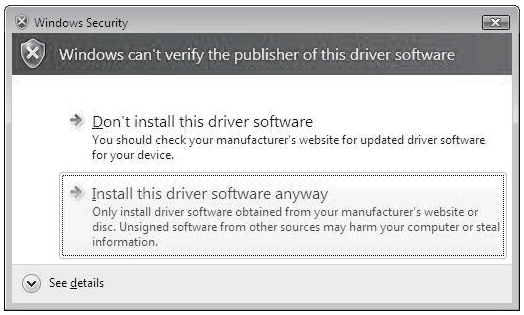
The product ID of the older version is described in "Software User Registration Card" included with the product.

When newly installing the product, the left screen does not appear.



7) Specify the installation Destination Folder.
If the installation Destination Folder is correct, click Next> .
If you change the destination folder, click Browse and specify a new drive and folder.

∗: The following screen appears in Windows Vista® .
Click "Install this driver software anyway".
This screen may appear in several times.



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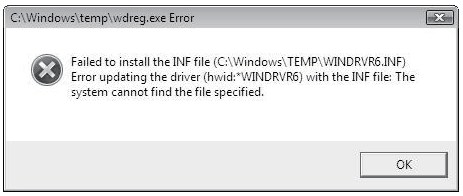
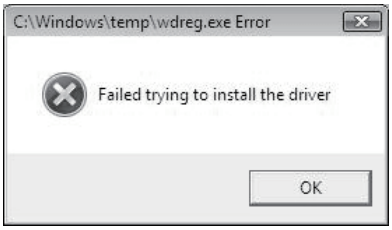
The either of the following screens may appear behind the Windows Security screen. Then, press the Alt + Tab keys to bring it to the front.
Click OK on the following screens.





∗: For Windows® XP, the following screen appears at first installation.
Click Continue.

We checked operations in Windows® XP (Problems never occur after installation.)
The following screen may appear behind another screen. Then, press the Alt + Tab keys to bring it to the front.

8) This completes installation.
Click OK.

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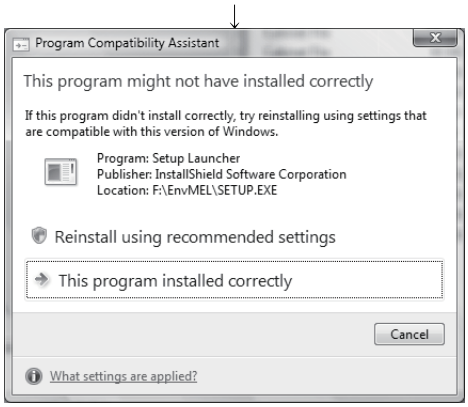
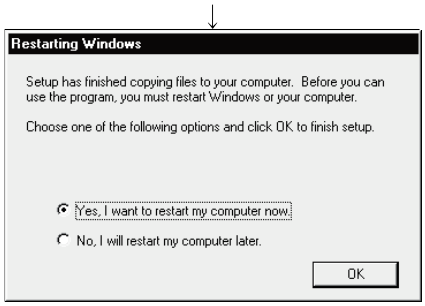


9) When the left screen appears on Windows Vista® , regardless of the installation result, choose "This program installed correctly". Do not choose "Reinstall using recommended settings", because the installer installs an incorrect module.



10) Windows® must be rebooted if the screen shown on the left appears.

(Completion)

REMARK

When Windows® XP Professional or Windows Vista® is used, the icons are registered to [Start] - [All Programs] - [MELSOFT Application].

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(2) When message appears at start of installation

When the installation of this product starts, the "This package is not in proper operating environment" message appears, disabling normal completion of installation.
In such a case, close all applications and perform the (a) to (c) operation.

(a) Installation of dcom95.exe or JAAXDIST.EXE

Execute "/Update/dcom95.exe" or "/Update/Jaaxdist.exe" within the product (CD-ROM).
Then, restart the personal computer and install the product.
The exe file to be executed on the corresponding operating system is indicated below.

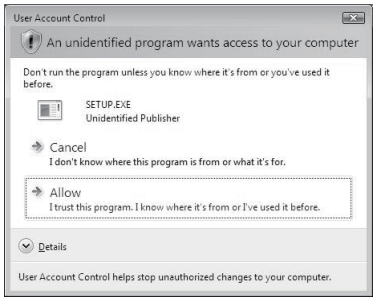
OS	File name
Microsoft® Windows® 95 Operating System Microsoft® Windows® 98 Operating System	dcom95.exe JAAXDIST.EXE
Microsoft® Windows NT® Workstation Operating System Version 4.0	JAAXDIST.EXE

(dcom95.exe and JAAXDIST.EXE are in the "Update" folder on CD-ROM.)

(b) Installation of EnvMEL

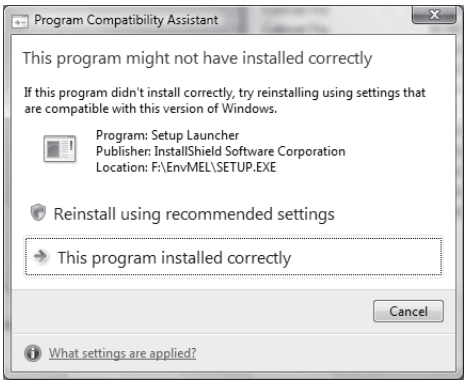
Execute "/EnvMEL/Setup.exe" within the product (CD-ROM).
Then, install the product.

* : When user account control is enabled in Windows Vista® , the following screen appears.
Click "Allow".

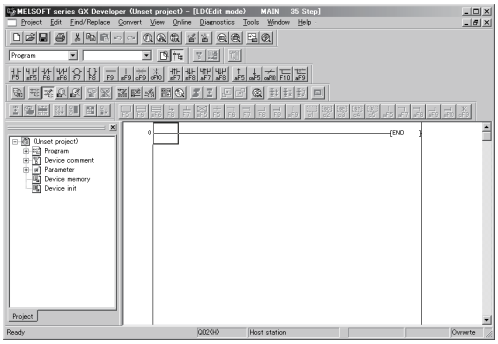


* : After executing the above exe file, reinstall the product. If this product is not installed properly at this time, reboot the personal computer.

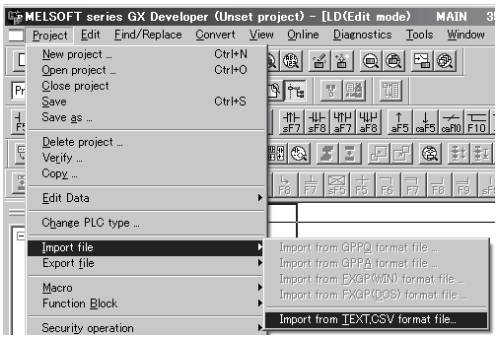
When the following screen appears on Windows Vista® , regardless of the installation result, choose "This program installed correctly".



(3) Confirming that the product has booted



1) Select "Do not use label" and open a new project on GX Developer.
For details, refer to "GX Developer Operating Manual".

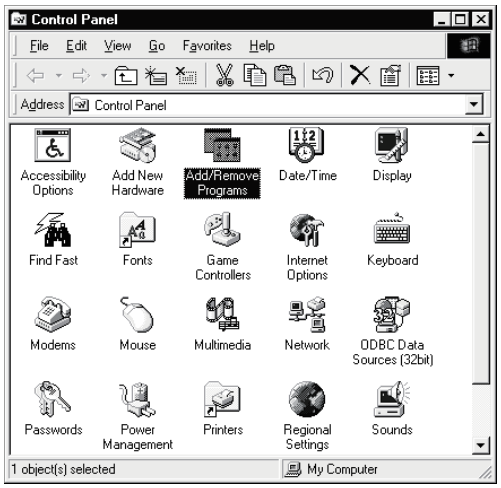


2) Confirm the [Import from TEXT, CSV format file] menu is activated in the [Project] – [Import file] menu.

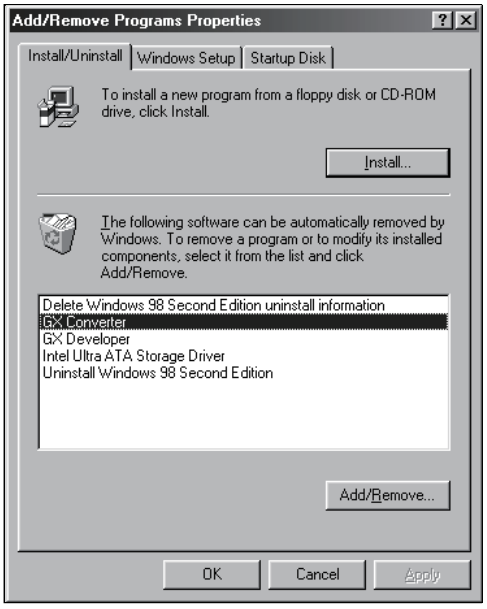
3.2 Uninstallation

This section describes the operation for removing the product form the hard disk.

Uninstallation of the product



↓



↓

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1) From the Control Panel, choose and double-click "Add/Remove Programs".
   To display the Control Panel, choose [Start]-[Settings]-[Control Panel].

REMARKS

When using Windows® XP , choose "Add or Remove Programs" from the Control Panel.
Chose "Uninstall a program" on the Control Panel in Windows Vista® .
To display the Control Panel, choose [Start] - [Control Panel].

2) Select the software package to be deleted/modified.
   Choose "GX Converter".
   After selection, click Add/Remove... .

The screen shown on the left is the one for Windows® 98.
The screen displayed varies with the OS.

REMARKS

The screen shown on the left is that of Windows® 98.
The displayed screen varies with the OS.
When using Windows® 2000 Professional, Windows® XP, perform the following operation.
(a) Click "Change/Remove Programs".
(b) Click "GX Converter".
(c) Click Change/Remove.

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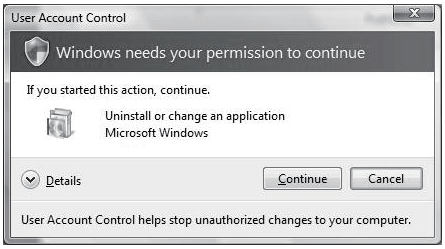
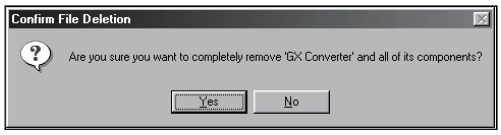
↓

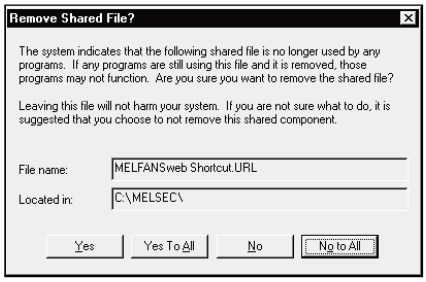
<For Windows Vista® >
Select GX Converter on the "Uninstall or change a program" screen, and click the Uninstall/Change button.

∗: When user account control is enabled in Windows Vista® , the following screen appears.
Click the Continue button.



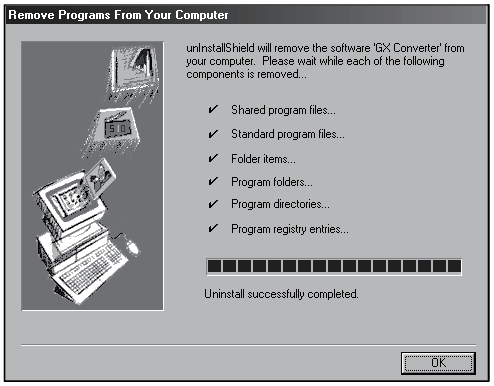


3) Check whether you will remove the software package or not.
When uninstalling it , click Yes .
Uninstallation starts.
When not uninstalling it, click No .
This returns to the preceding screen.
∗: Components indecate the icons and files installed.



4) If the left screen has appeared, click the No To All button.
Clicking the Yes or Yes To All button deletes all shared files of Windows® compatible MELSOFT software.
Therefore, when deleting the product only, click No To All button.

↓



5) Click OK when the message indicating the end of removal has appeared.

When the message indicating completion has appeared, uninstallation is complete.

↓

(Completion)

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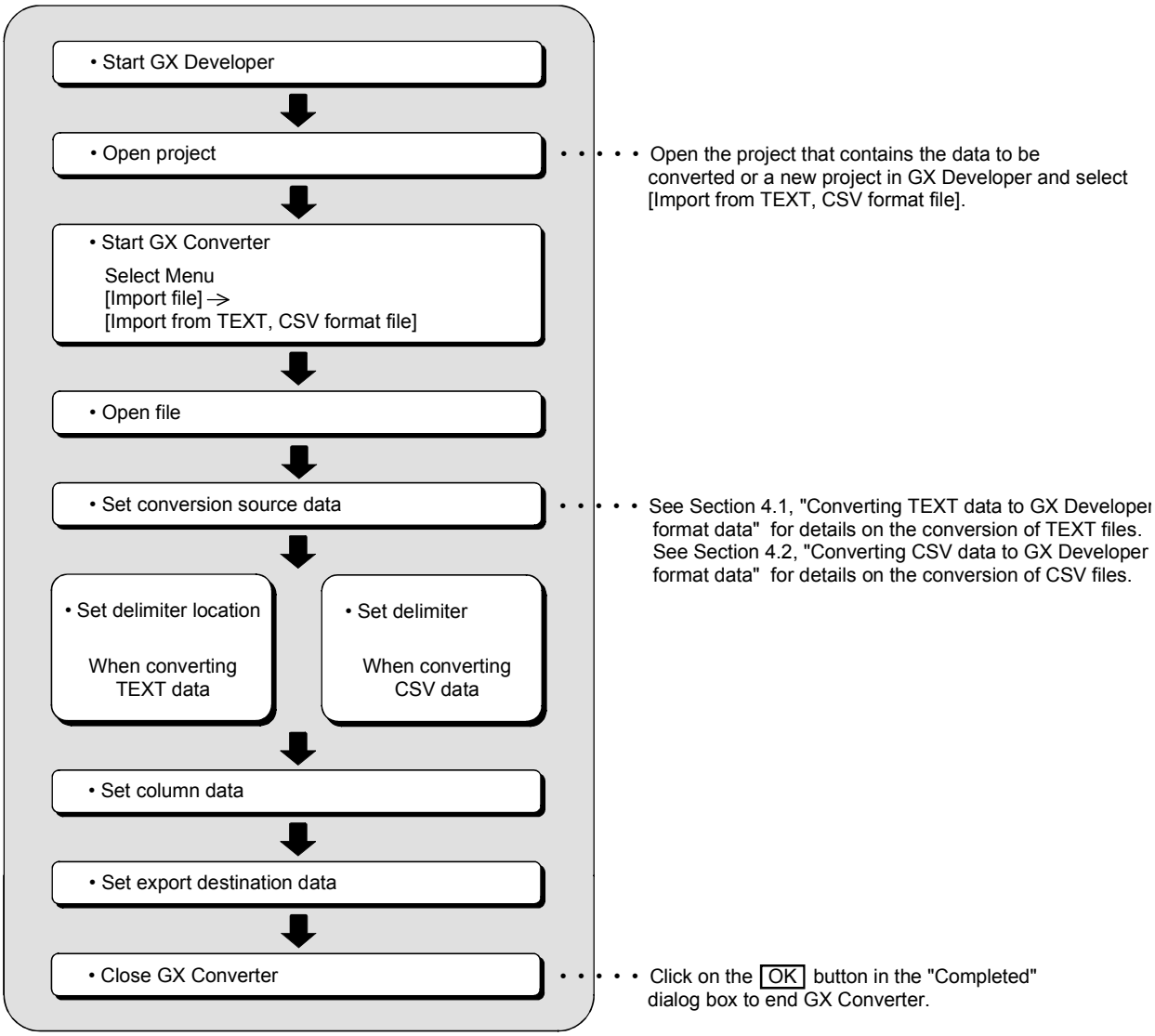
4. CONVERTING TEXT,CSV FORMAT DATA TO GX Developer FORMAT DATA

This function converts TEXT,CSV format data to List or Device comments, which are the formats that can be handled by GX Developer.

The following illustrates the operation procedure for converting TEXT,CSV format data to a List or Device comments so that the GX Developer can use.



REMARK

See Appendix 3, "Converting CADIF character-string data" for information on reading CADIF character-string data.

4.1 Converting TEXT Format Data to GX Developer Format Data

This section explains the operation of converting TEXT format data to a List or Device comments, which are the formats the GX Developer can use.

4.1.1 Converting TEXT format data to a list

The following explains the operation of converting TEXT format data to a List, which can be used by the GX Developer.

POINT

- See Section 6.2.1, "When a List is import by the GX Developer" for details on file formats.
- There may be some cases where Instruction, I/O (Device), etc. cannot be converted, depending on the CPU type of the project opened in the GX Developer. See "GX Developer Operating Manual" for details.

(1) Start GX Developer

Start GX Developer
↓
Open project

Start GX Developer and open the project containing the TEXT format data you wish to import.

(2) Start GX Converter

Start GX Converter.

1) Start GX Converter by clicking on
[Project] —
[Import file] —
[Import from TEXT, CSV format file].

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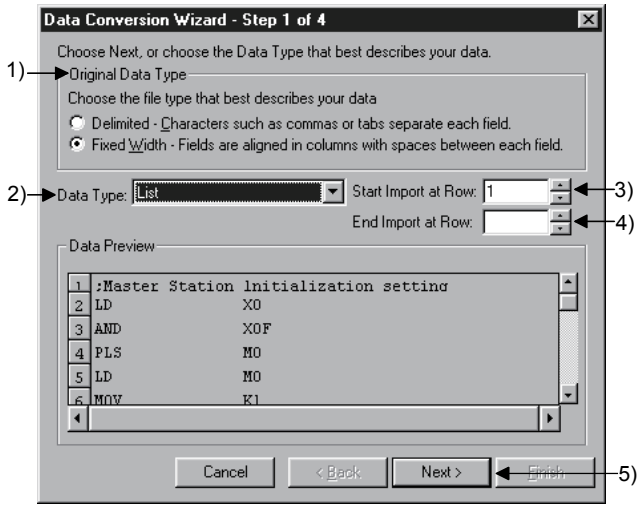
(From the previous page)

(3) Open file

Select the TEXT format file you wish to convert to a GX Developer List.

(4) Set conversion source data



Set the format and conversion range of the data to be converted.

1) Select " TEXT."
2) Select "List."
3) Enter the Start Import at Row.
4) Enter the End Import at Row.
   If the number of rows to be converted is not entered, conversion will take place until the end of the file is reached.
5) When the setting is complete, proceed to the next step by clicking the NEXT> button.

Caution

- About characters that cannot be displayed in the Data Preview area
  Characters not displayed will be displayed with " · ".
- When setting conversion row
  The program cannot proceed if conversion rows are set as "Start Import at Row > End Import at Row."
- About tabs
  Select "CSV" in step 1) for files whose contents are separated by tabs.
  See Section 6.1, " About TEXT,CSV format files" for details.

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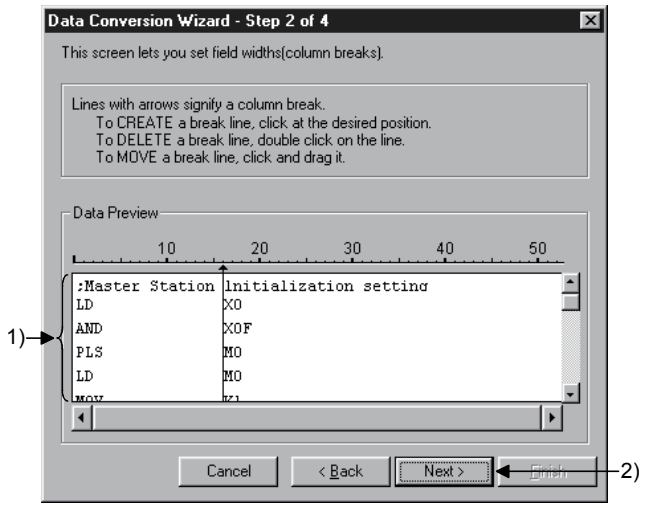
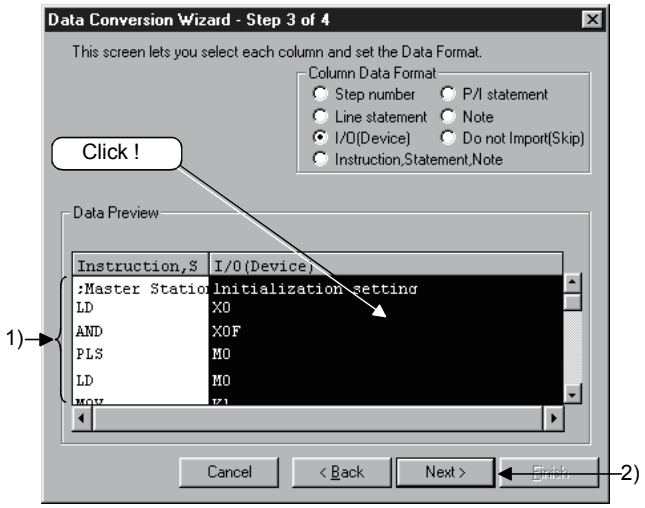
(5) Set delimiter location



Separate the data to be converted into columns.

1) Separate the data in the Data Preview area. (Can be separated at a maximum of 16 locations.)
   - Separating procedure
     Click on the location to be separated.
     An arrow is displayed in the delimiter location.
   - Changing delimiter locations
     Drag the arrow to change the delimiter location.
   - Deleting delimiter
     Double-click the arrow to clear the delimiter.
2) When the setting is complete, proceed to the next step by clicking the NEXT> button.

(6) Set column data



Set the data types for the columns.

1) Set data types in the Data Preview area.
   Select a column (the selected column becomes highlighted in black) by clicking the Data Preview area of each data column.
   Next, select a column data format from "Column Data Format" in the upper-right area.
   To select multiple settings, repeat this operation.
2) When the setting is complete, proceed to the next step by clicking the NEXT> button.

Caution

- When setting data format
  When data format are overlapped, the program cannot proceed to the next step if the overlapping data format is other than Instruction, Statement, or Note.
  When "Do not Import (Skip)" is selected, conversion will not take place even if data is present in the column.

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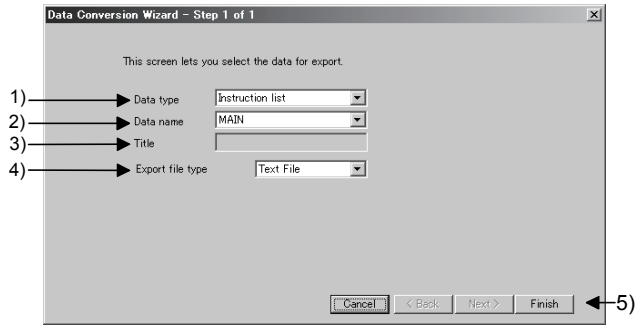
(7) Set export destination data



Set which project data within the GX Developer the converted data is to be export.

1) Select common comment or comment by program if the data type is device comment. (This setting is available for device comment only.)
2) Specify a data name for the data to be converted.
   Enter or select a data name.
   The entered data name is export to the project that is currently open in the GX Developer.
3) Enter a Title for the data to be converted.
4) Select a Conversion type for wrong instruction.
   • Do not Import (Skip)
   Invalid instructions are disregarded and no conversion takes place.
   • To line statements
   Invalid instructions are converted to line statements.
   • To invalid instructions
   Invalid instructions are converted as instruction code errors.
5) When the setting is complete, execute the conversion processing by clicking the Finish button.

Caution

• When entering a data name
  If the PLC series for the project is a QnA Series, the data name must be 8 characters or less. If the PLC series for the project is A Series,FX Series, or Motion (SCPU), only the predetermined names such as MAIN and SUB1 can be used.
  See "GX Developer Operating Manual" for details.
• When an existing data name is entered or selected
  An overwrite verification dialog box is displayed.
  Click on the Yes button to discard and overwrite the old data.
  Click on the No button to end GX Converter.
• When selecting a conversion method
  When a conversion error is generated, the content of the conversion error will be displayed after "(8) Conversion proces" , regardless of selecting of the Conversion type for wrong instruction.

(Continued on the next page)

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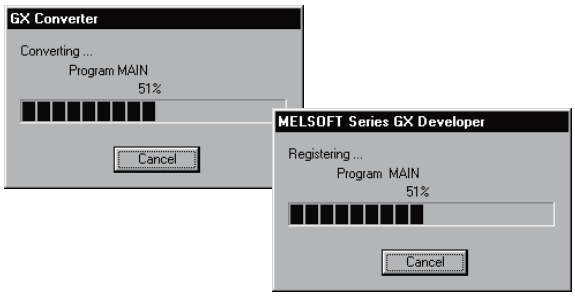
(From the previous page)

(8) Conversion proces



This processing converts TEXT format data to a List and registers it.

When each Cancel button is pressed, the corresponding conversion processing will be aborted.

Caution

• When a Cancel button is clicked

A cancel verification dialog box is displayed.
Clicking the Yes button stops the conversion processing.
No data will be created in the GX Developer.
When overwriting, the previous data remains.
Clicking the No button continues the conversion processing.

(9) Close GX Converter

Conversion error generated

• See Section 4.3, "Handling of conversion errors."

Clicking the OK button ends the conversion processing and closes GX Converter.

If a conversion error is displayed, see to Section 4.3, "Handling of conversion errors" for details.

4.1.2 Converting TEXT Format Data to Device Comments

The following explains the operation of converting TEXT format data to Device comments, which are the formats the GX Developer can use.

POINT

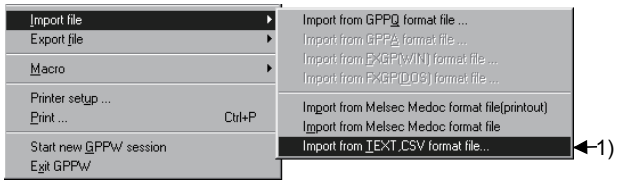
- See Section 6.2.2, "When Device comments are import by the GX Developer" for details on file formats.
- There may be some cases where Instruction, I/O (Device), etc. cannot be converted, depending on the CPU type of the project opened in the GX Developer. See "GX Developer Operating Manual" for details.

(1) Start GX Developer

Start GX Developer
↓
Open project

Start GX Developer and open the project containing the TEXT format data you wish to import.

(2) Start GX Converter



Start GX Converter.

1) Start GX Converter by clicking on
[Project] —
[Import file] —
[Import from TEXT, CSV format file].

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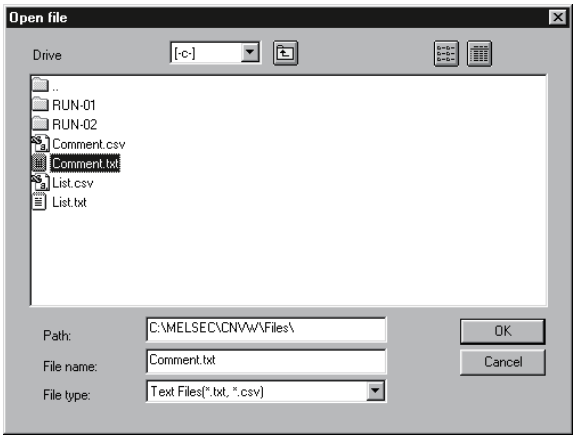
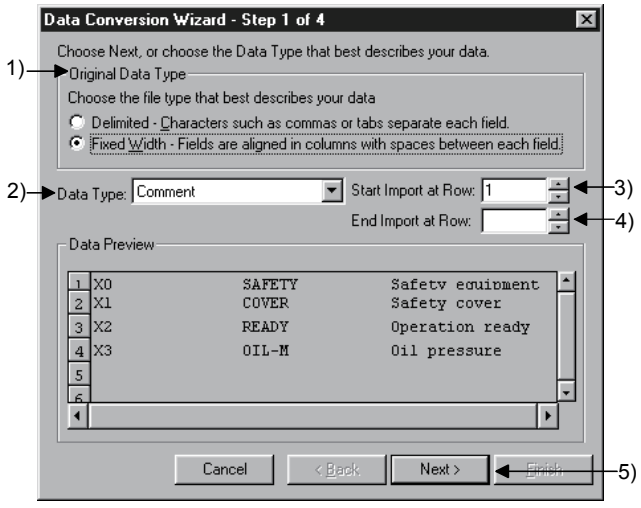
(3) Open file



Select the TEXT format file you wish to convert to a GX Developer Device comments.

(4) Set conversion source data



Set the format and conversion range of the data to be converted.

1) Select "TEXT."
2) Select "Comment."
3) Enter the Start Import at Row.
4) Enter the End Import at Row.
   If the number of rows to be converted is not entered, conversion will take place until the end of the file is reached.
5) When the setting is complete, proceed to the next step by clicking the NEXT> button.

Caution

- About characters that cannot be displayed in the Data Preview area
  Characters not displayed will be displayed with " · ".
- When setting conversion row
  The program cannot proceed if conversion rows are set as "Start Import at Row > End Import at Row."
- About tabs
  Select "CSV" in step 1) for files whose contents are separated by tabs.
  See Section 6.1, "About TEXT,CSV format files" for details.

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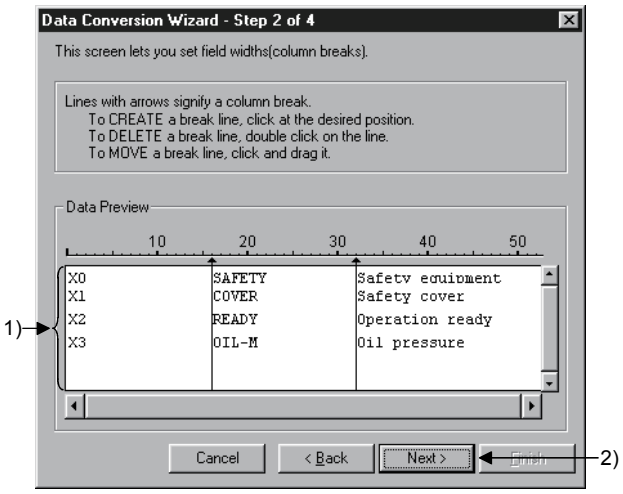
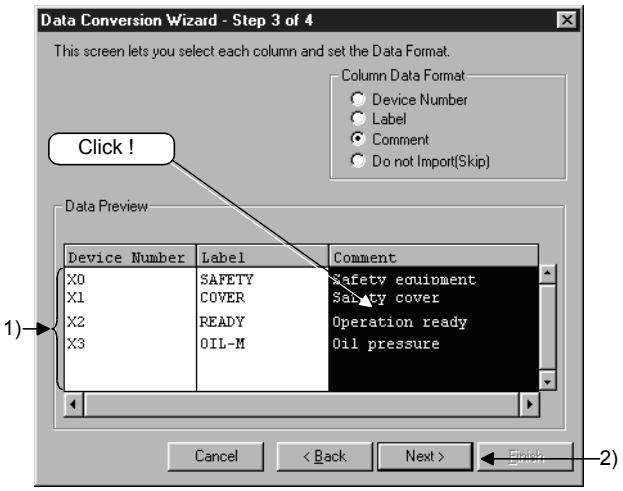
(5) Set delimiter location



Separate the data to be converted into columns.

1) Separate the data in the Data Preview area.
   (Can be separated at a maximum of 16 locations.)
   • Separating procedure
   Click on the location to be separated.
   An arrow is displayed in the delimiter location.
   • Changing delimiter locations
   Drag the arrow to change the delimiter location.
   • Deleting delimiter
   Double-click the arrow to clear the delimiter.
2) When the setting is complete, proceed to the next step by clicking the NEXT> button.

(6) Set column data



Set the data types for the columns.

1) Set data types in the Data Preview area.
   Select a column (the selected column becomes highlighted in black) by clicking the Data Preview area of each data column.
   Next, select a column data format from "Column Data Format" in the upper-right area.
   To select multiple settings, repeat this operation.
2) When the setting is complete, proceed to the next step by clicking the NEXT> button.

Caution

• When setting data format
When data format are overlapped, the program cannot proceed to the next step if the overlapping data format is other than Device number.
When "Do not Import (Skip)" is selected, conversion will not take place even if data is present in the column.

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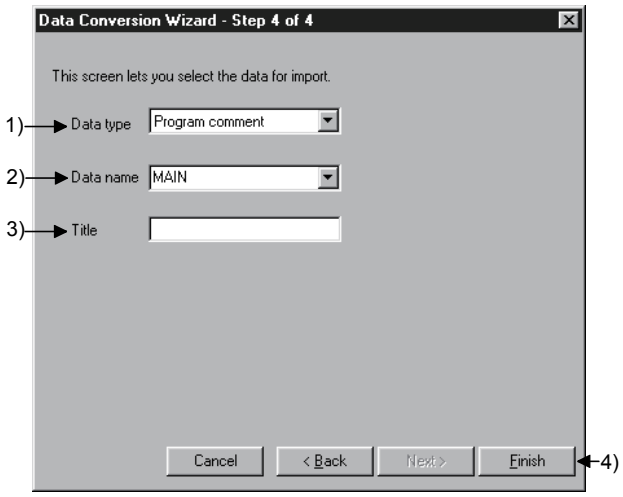
(7) Set export destination data



Set which project data within the GX Developer the converted data is to be export.

1) Select the data type for the data to be export.
2) Specify a data name for the data to be converted.
   Enter or select a data name.
   The entered data name is export to the project that is currently open in the GX Developer.
3) Enter a Title for the data to be export.
4) When the setting is complete, execute the conversion processing by clicking the Finish button.

Caution

- When entering a data name
  If the PLC series for the project is a QnA Series, the data name must be 8 characters or less. If the PLC series for the project is A Series, FX Series, or Motion (SCPU), only the predetermined names such as MAIN and SUB1 can be used.
  See " GX Developer Operating Manual" for details.
- When an existing data name is entered or selected
  An overwrite verification dialog box is displayed.
  Click on the Yes button to discard and overwrite the old data.
  Click on the No button to end GX Converter.

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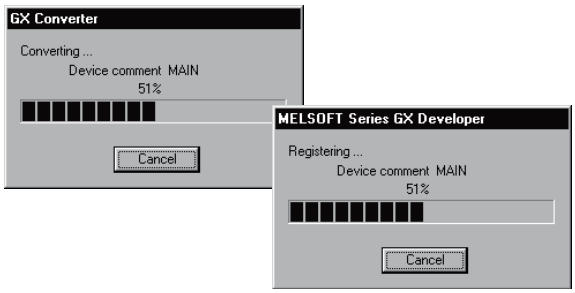
(8) Conversion proces



This processing converts TEXT format data to Device comments and registers them.

When each Cancel button is pressed, the corresponding conversion processing will be aborted.

Caution

- When a Cancel button is clicked during Converting

  A cancel verification dialog box is displayed.
  Clicking the Yes button stops the conversion processing.
  No data will be created in the GX Developer.
  When overwriting, the previous data remains.
  Clicking the No button continues the conversion processing.

- When a Cancel button is clicked during Registering

  A cancel verification dialog box is displayed.
  Clicking the Yes button stops the conversion processing.
  The data registered until immediately before the cancellation are created in the GX Developer.
  When overwriting, the previous data are discarded.
  Clicking the No button continues the conversion processing.

(9) Close GX Converter

Conversion error generated

- See Section 4.3, "Handling of conversion errors."

Clicking the OK button ends the conversion processing and closes GX Converter.

If a conversion error is displayed, see Section 4.3, "Handling of conversion errors" for details.

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4.2 Converting CSV Format Data to GX Developer Format Data

This section explains the operation of converting CSV format data to a List or Device comments, which are the formats the GX Developer can use.

4.2.1 Converting CSV format data to a list

The following explains the operation of converting CSV format data to a List, which can be used by the GX Developer.

POINT

- See Section 6.2.1, "When a List is import by the GX Developer " for details on file formats.
- There may be some cases where Instruction, I/O (Device), etc. cannot be converted, depending on the CPU type of the project opened in the GX Developer. See " GX Developer Operating Manual" for details.

(1) Start GX Developer

Start GX Developer
↓
Open project

Start GX Developer and open the project containing the CSV format data you wish to import.

(2) Start GX Converter

Start GX Converter.

1) Start GX Converter by clicking on
[Project] —
[Import file] —
[Import from TEXT, CSV format file].

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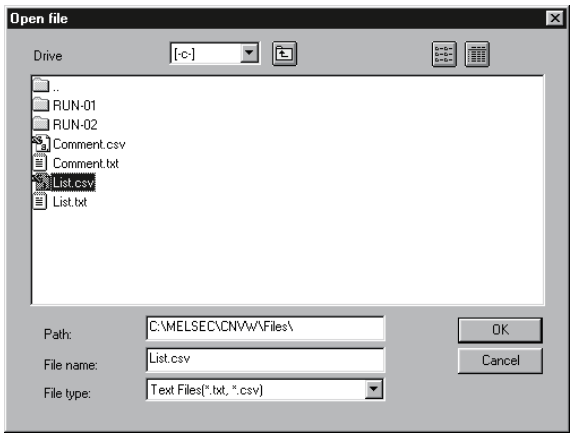
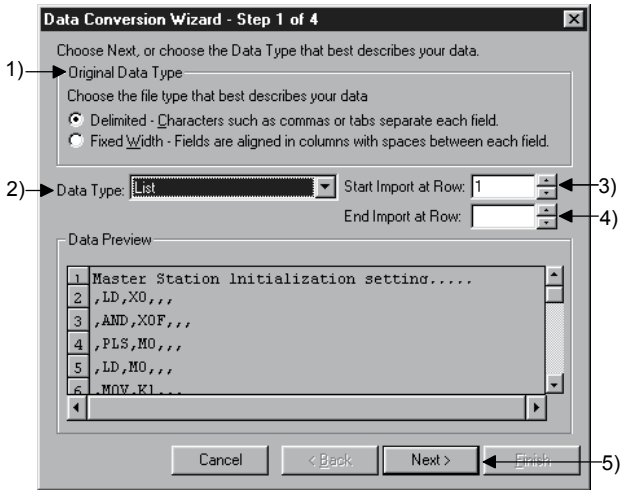
(3) Open file



Select the CSV format file you wish to convert to a GX Developer List.

(4) Set conversion source data



Set the format and conversion range of the data to be converted.

1) Select "CSV."
2) Select "List."
3) Enter the Start Import at Row.
4) Enter the End Import at Row.
   If the number of rows to be converted is not entered, conversion will take place until the end of the file is reached.
5) When the setting is complete, proceed to the next step by clicking the NEXT> button.

Caution

- About characters that cannot be displayed in the Data Preview area
  Characters not displayed will be displayed with " · ".
- When setting conversion row
  The program cannot proceed if conversion rows are set as "Start Import at Row > End Import at Row."
- About tabs
  Select "CSV" in step 1) for files whose contents are separated by tabs.
  See Section 6.1, "About TEXT,CSV format files" for details.

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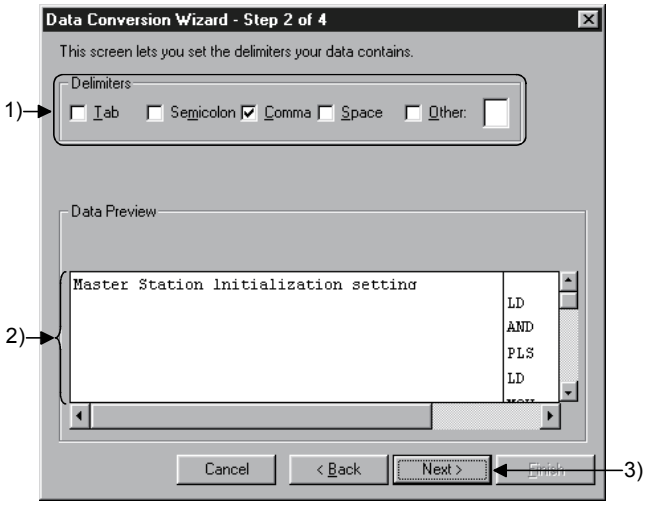
(From the previous page)

(5) Set delimiter location



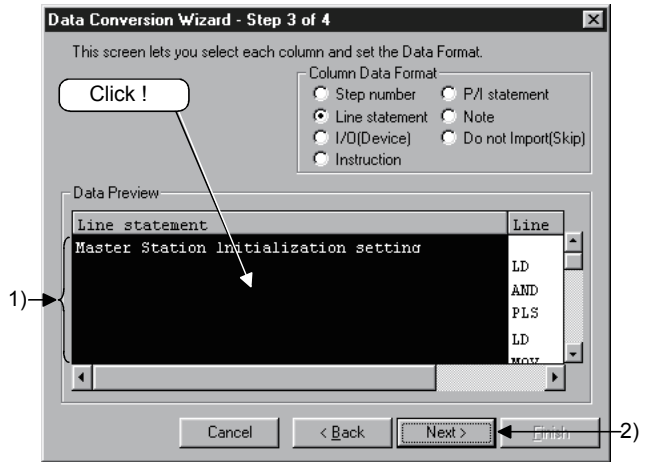
Caution

• About data created using spreadsheet software
Commas are used as the delimiters in the data created and edited using spreadsheet software.

Separate into columns by setting delimiters.

1) Select a delimiter for each data. (Multiple delimiters can be selected.)
   • Tab
     Select it when using tabs as delimiters.
   • Semicolon
     Select it when using semicolons as delimiters.
   • Comma (default)
     Select it when using commas as delimiters.
   • Space
     Select it when using spaces as delimiters.
   • Other
     When using a character other than above as the delimiter, check the checkbox and enter the character.
2) Verify the separated data in the Data Preview area.
3) After the setting is complete, click on the NEXT> button and proceed to the next step.

(6) Set column data



Caution

• When setting data format
When data format are overlapped, the program cannot proceed to the next step if the overlapping data format is other than Instruction.
When "Do not Import (Skip)" is selected, conversion will not take place even if data is present in the column.

Set the column data format.

1) Set data types in the Data Preview area.
   Select a column (the selected column becomes highlighted in black) by clicking the Data Preview area of each data column.
   Next, select a column data format from "Column Data Format" in the upper-right area.
   To select multiple settings, repeat this operation.
2) When the setting is complete, proceed to the next step by clicking the NEXT> button.

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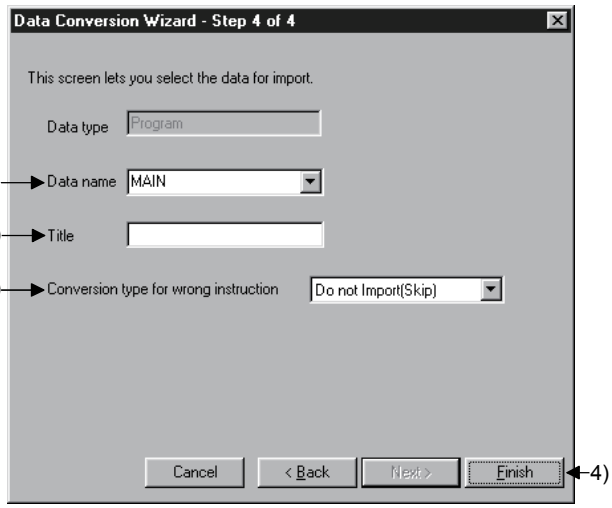
(7) Set export destination data



Set which project data within the GX Developer the converted data is to be export.

1) Specify a data name for the data to be converted.
   Enter or select a data name.
   The entered data name is export to the project that is currently open in the GX Developer.
2) Enter a Title for the data to be export.
3) Select a Conversion type for wrong instruction.
   • Do not Import (Skip)
     Invalid instructions are disregarded and no conversion takes place.
   • To line statements
     Invalid instructions are converted to line statements.
   • To invalid instructions
     Invalid instructions are converted as instruction code errors.
4) When the setting is complete, execute the conversion processing by clicking the Finish button.

Caution

• When entering a data name
  If the PLC series for the project is a QnA Series, the data name must be 8 characters or less. If the PLC series for the project is A Series, FX Series, or Motion (SCPU), only the predetermined names such as MAIN and SUB1 can be used.
  See " GX Developer Operating Manual" for details.
• When an existing data name is entered or selected
  An overwrite verification dialog box is displayed.
  Click on the Yes button to discard and overwrite the old data.
  Click on the No button to end GX Converter.
• When selecting a conversion method
  When a conversion error is generated, the content of the conversion error will be displayed after "(8) Conversion proces", regardless of the selecting of Conversion type for wrong instruction.

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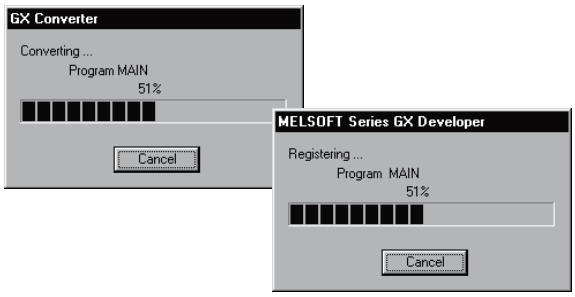
(8) Conversion proces



This processing converts CSV format data to a List and registers it.

When each Cancel button is pressed, the corresponding conversion processing will be aborted.

Caution

• When a Cancel button is clicked

A cancel verification dialog box is displayed.
Clicking the Yes button stops the conversion processing.
No data will be created in the GX Developer.
When overwriting, the previous data remains.
Clicking the No button continues the conversion processing.

(9) Close GX Converter

Conversion error generated

• See Section 4.3, "Handling of conversion errors."

Clicking the OK button ends the conversion processing and closes GX Converter.

If a conversion error is displayed, see Section 4.3, " Handling of conversion errors" for details.

4.2.2 Converting CSV Format Data to Device Comments

The following explains the operation of converting CSV format data to Device comments, which are the formats the GX Developer can use.

POINT

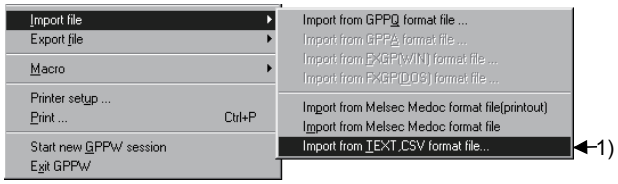
- See Section 6.2.2, "When Device comments are import by the GX Developer " for details on file formats.
- There may be some cases where Instruction, I/O (Device), etc. cannot be converted, depending on the CPU type of the project opened in the GX Developer. See " GX Developer Operating Manual" for details.

(1) Start GX Developer

Start GX Developer
↓
Open project

Start GX Developer and open the project containing the CSV format data you wish to import.

(2) Start GX Converter



Start GX Converter.

1) Start GX Converter by clicking on
[Project] —
[Import file] —
[Import from TEXT, CSV format file].

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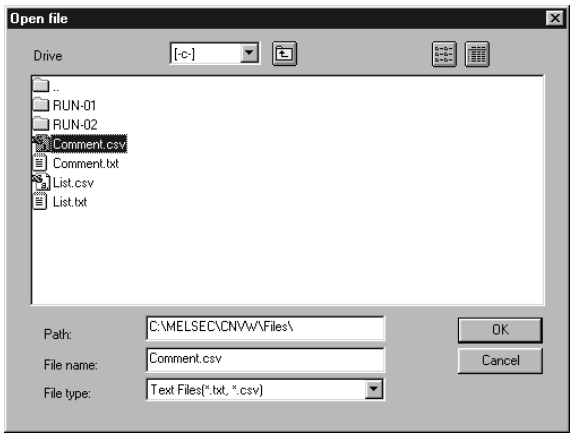
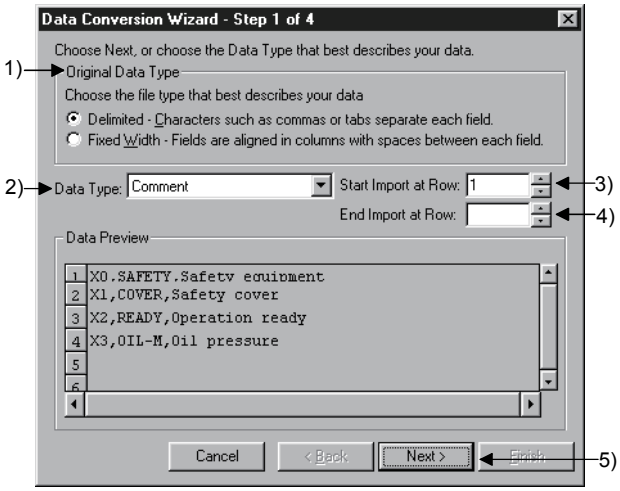
(3) Open file



Select the CSV format file you wish to convert to a GX Developer Device comments.

(4) Set conversion source data



Set the format and conversion range of the data to be converted.

1) Select "CSV."
2) Select "Comment."
3) Enter the Start Import at Row.
4) Enter the End Import at Row.
   If the number of rows to be converted is not entered, conversion will take place until the end of the file is reached.
5) When the setting is complete, proceed to the next step by clicking the NEXT> button.

Caution

- About characters that cannot be displayed in the Data Preview area
  Characters not displayed will be displayed with " · ".
- When setting conversion row
  The program cannot proceed if conversion rows are set as "Start Import at Row > End Import at Row."
- About tabs
  Select "CSV" in step 1) for files whose contents are separated by tabs.
  See Section 6.1, " About TEXT,CSV format files" for details.

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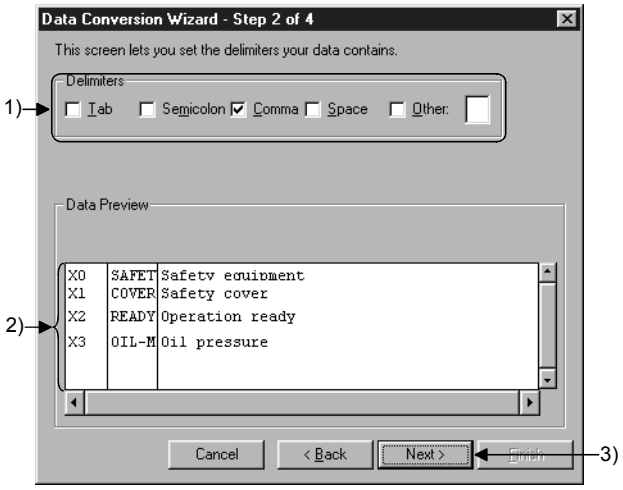
(5) Set delimiter



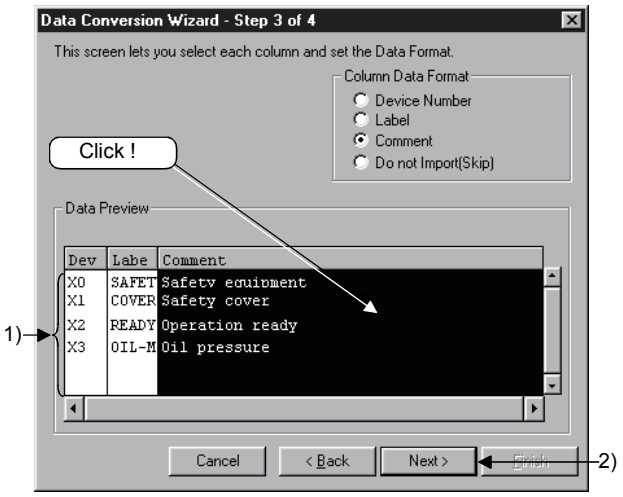
Caution

• About data created using spreadsheet software
Commas are used as the delimiters in the data created and edited using spreadsheet software.

Separate into columns by setting delimiters.

1) Select a delimiter for each data. (Multiple delimiters can be selected.)
   • Tab
     Select it when using tabs as delimiters.
   • Semicolon
     Select it when using semicolons as delimiters.
   • Comma (default)
     Select it when using commas as delimiters.
   • Space
     Select it when using spaces as delimiters.
   • Other
     When using a character other than above as the delimiter, check the checkbox and enter the character.
2) Verify the separated data in the Data Preview area.
3) When the setting is complete, proceed to the next step by clicking the NEXT> button.

(6) Set column data



Caution

• When setting data format
When data format are overlapped, the program cannot proceed to the next step if the overlapping data format is other than Device number.
When "Do not Import (Skip)" is selected, conversion will not take place even if data is present in the column.

Set the column data format.

1) Set data types in the Data Preview area.
   Select a column (the selected column becomes highlighted in black) by clicking the Data Preview area of each data column.
   Next, select a column data format from "Column Data Format" in the upper-right area.
   To select multiple settings, repeat this operation.
2) When the setting is complete, proceed to the next step by clicking the NEXT> button.

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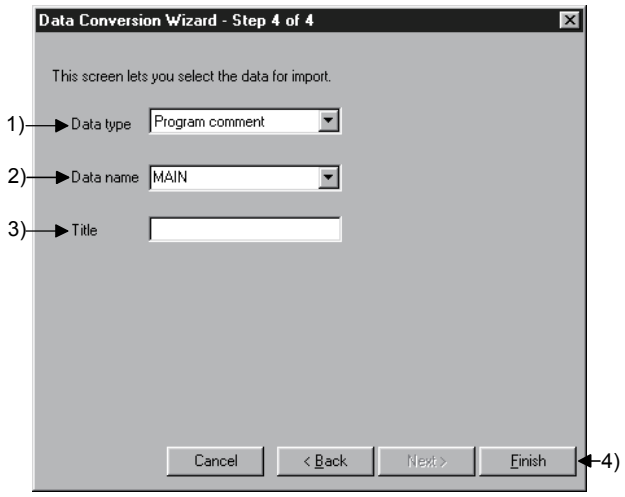
(7) Set export destination data



Set which project data within the GX Developer the converted data is to be export.

1) Select the data type for the data to be export.
2) Specify a data name for the data to be converted.
   Enter or select a data name.
   The entered data name is export to the project that is currently open in the GX Developer.
3) Enter a Title for the data to be export.
4) When the setting is complete, execute the conversion processing by clicking the Finish button.

Caution

- When entering a data name
  If the PLC series for the project is a QnA Series, the data name must be 8 characters or less. If the PLC series for the project is A Series, FX Series, or Motion (SCPU), only the predetermined names such as MAIN and SUB1 can be used.
  See " GX Developer Operating Manual" for details.
- When an existing data name is entered or selected
  An overwrite verification dialog box is displayed.
  Click on the Yes button to discard and overwrite the old data.
  Click on the No button to end GX Converter.

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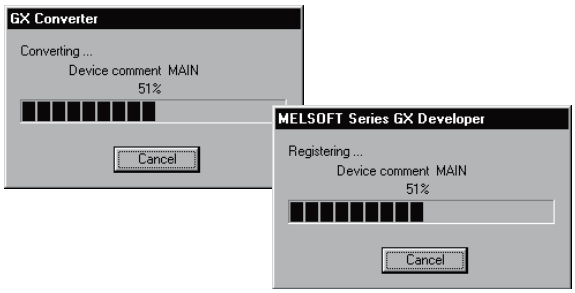
(8) Conversion proces



This processing converts CSV format data to Device comments and registers them.

When each Cancel button is pressed, the corresponding conversion processing will be aborted.

Caution

- When a Cancel button is clicked during Converting

  A cancel verification dialog box is displayed.
  Clicking the Yes button stops the conversion processing.
  No data will be created in the GX Developer.
  When overwriting, the previous data remains.
  Clicking the No button continues the conversion processing.

- When a Cancel button is clicked during Registering

  A cancel verification dialog box is displayed.
  Clicking the Yes button stops the conversion processing.
  The data registered until immediately before the cancellation are created in the GX Developer.
  When overwriting, the previous data are discarded.
  Clicking the No button continues the conversion processing.

(9) Close GX Converter

Conversion error generated

- See Section 4.3, "Handling of conversion errors."

Clicking the OK button ends the conversion processing and closes GX Converter.

If a conversion error is displayed, see Section 4.3, "Handling of conversion errors" for details.

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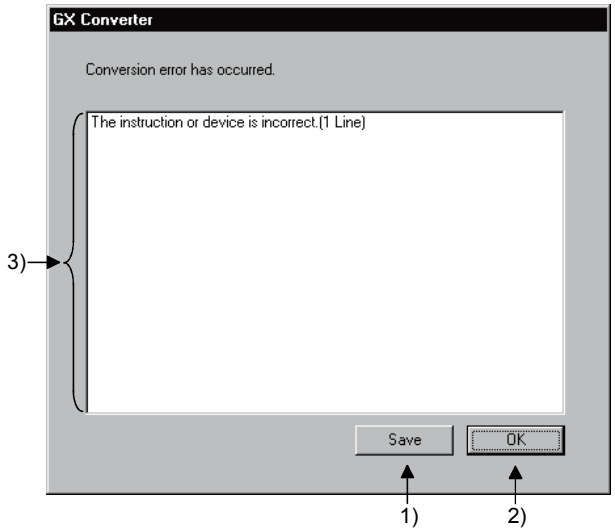
4.3 Handling of conversion errors

This section explains the corrective actions when a conversion error is generated when data in TEXT, CSV format is import by the GX Developer.

(1) Conversion error display



Caution

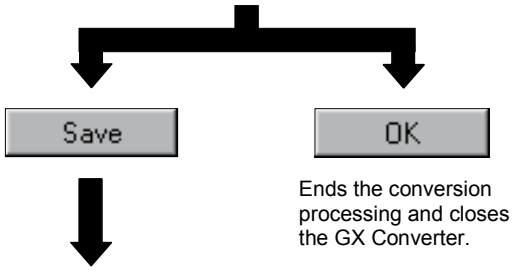
• About the error line for an Instruction or I/O (Device) error

If an I/O (Device) error occurs when multiple I/O (Device) exist for a single instruction, the line number for the Instruction will be displayed as the error line number.

Verify or save the conversion error.

First perform the following operations, then correct the conversion error.

1) To save the conversion errors
   Save the conversion error contents to a specified file by clicking on the Save button.
   Up to 100 occurrences (lines) of errors can be saved.
2) To discard conversion errors
   Click the OK button to end the conversion processing and then close the GX Converter.
3) Up to 100 occurrences (lines) of conversion errors will be displayed.
   When the number of conversion errors exceeds 100 occurrences (lines), the message "Convert error counter is over 100. Cancelled over 100 errors" will be displayed on line number 101.
   See Appendix 2, "Conversion error message List" for detailed explanations of error messages.



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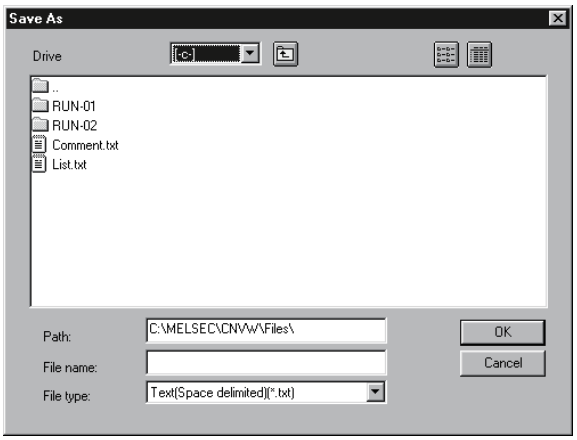
(2) Save conversion errors



Save the conversion error contents to a file.

The conversion error contents can be saved to a file with the desired file format (extension).

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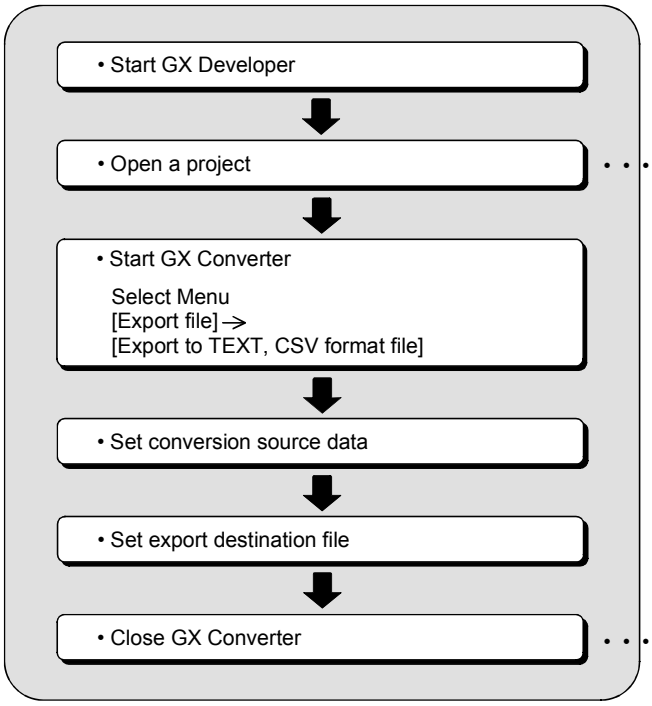
5. CONVERTING GX Developer FORMAT DATA TO TEXT, CSV FORMAT DATA

List and Device comments created by GX Developer can be converted to TEXT, CSV format data, which can be read by other commercial software.

This section describes the operation procedure for converting List and Device comments created by GX Developer to TEXT, CSV format data, which can be read by other commercial software.



• • • • • Open the project that contains the data you wish to convert in GX Developer, then select [Export to TEXT, CSV format file].

• • • • • Click on the OK button in the "Completed" dialog box to end GX Converter.

5.1 Converting GX Developer Format Data to Text, CSV Format Data

This section explains the operation procedures for converting List and Device comments to TEXT, CSV format data, which can be read by other commercial software.

POINT

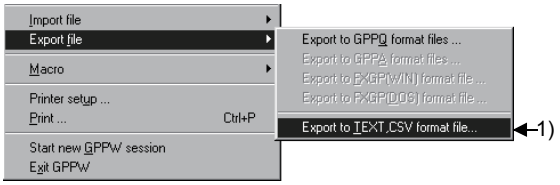
- GX Converter cannot be started up with projects using labels.
- See Section 6.3, "File formats when the GX Developer format data is export to a TEXT, CSV format file" for details on file formats.

(1) Start GX Developer

Start GX Developer
↓
Open project

Start GX Developer and open the project that contains the List or Device comments you wish to convert to TEXT, CSV format data.

(2) Start GX Converter



Start GX Converter.

1) Start GX Converter by clicking on
[Project] —
[Export file] —
[Export to TEXT, CSV format file].

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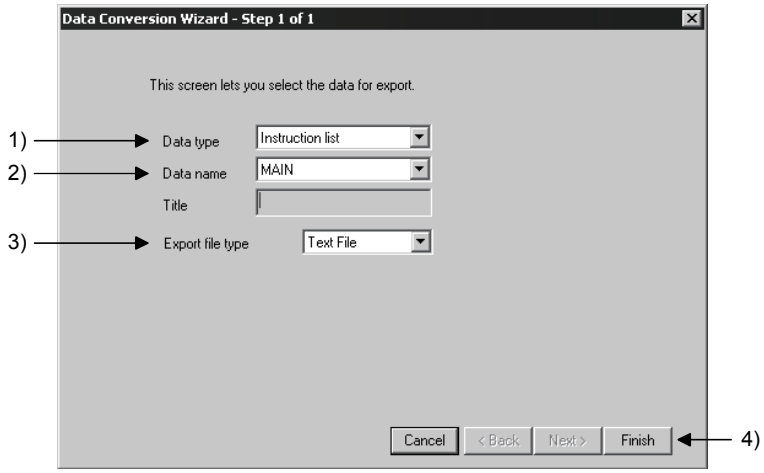
(3) Set conversion source data



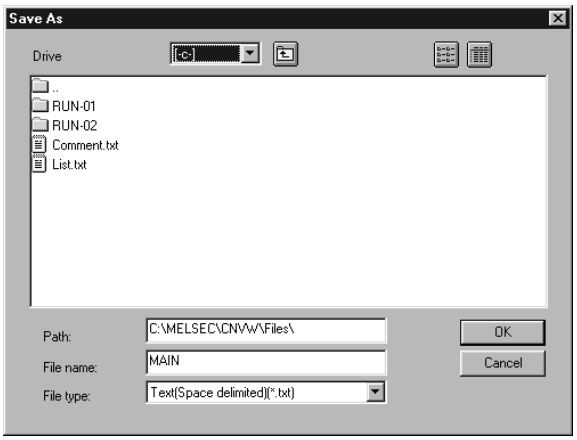
Perform settings for the data to be converted.

1) Select the data type for the data to be converted.
2) Select the name of the data to be converted.
   Select from the data within the project that is currently open.
3) Select the file format after the conversion.
4) When the setting is complete, proceed to the next step by clicking the Finish button.

Data selection by conversion format

	Convert to TEXT format	Convert to CSV format
List	Set 1) to "Instruction list". Select the data name 2). Set 3) to "TEXT file".	Set 1) to "Instruction list". Select the data name 2). Set 3) to "CSV file".
Device comment	Set 1) to "Common comment" or "Program comment". Select the data name 2). Set 3) to "TEXT file".	Set 1) to "Common comment" or "Program comment". Select the data name 2). Set 3) to "CSV file".

(4) Select export destination file



Enter or select the filename in which to export the converted data.

POINT

1. When using the file extension other than “csv” and “txt”, type the filename and extension in the “File name” box.
   Ex.) In the case of the extension “001”, type “ABCDEFGH.001” in the “File name” box.
2. When using a dot “.” for the filename, type the file name and extension in the “File name” box.
   Ex.) In the case of filename “No.3”, type “No.3.csv” in the “File name” box.
3. The file will be saved as the file type that is selected in the “File type” box on the “File Conversion Wizard”. (See (3)-3) above.)

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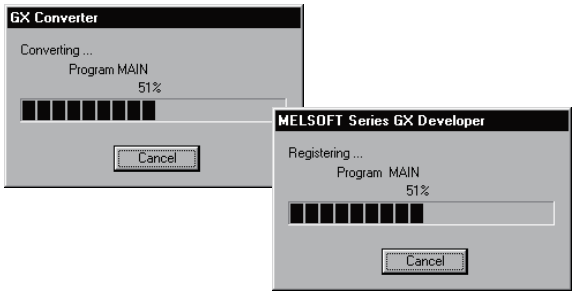
(5) Conversion proces



Read the List or Device comments and convert to TEXT, CSV format data.

When each Cancel button is pressed, the corresponding conversion processing will be aborted.

Caution

• When a Cancel button is clicked

A cancel verification dialog box is displayed.
Clicking the Yes button stops the conversion processing.
No data will be created in the GX Developer.
When overwriting, the previous data remains.
Clicking the No button continues the conversion processing.

(6) Close GX Converter

Clicking the OK button ends the conversion processing and closes GX Converter.

5 - 4

6. FILE FORMATS

This chapter explains the formats of TEXT, CSV format file, which can be used for GX Converter conversion.

6.1 About TEXT CSV format files

(1) TEXT format files (delimited by spaces)

This is a file format in which data are separated by spaces.

(a) Necessary commercial software

Use a TEXT editor to create or edit List or Device comments.

(b) About the use of tabs

Do not use tabs in TEXT format files.
The GX Converter recognizes data which are separated by tabs as CSV format data.
In the CSV format, a single tab is recognized as a delimiter, so caution is necessary.
When reading data separated by tabs using GX Developer, perform conversion by selecting " TEXT format" for "Set conversion source data."

(2) CSV format files (delimited by commas)

This is a file format in which data are separated by commas.
The GX Converter supports conversion of data separated by delimiters other than commas.

(a) Necessary commercial software

List and Device comments can be created and edited using a spreadsheet. Alternatively, a TEXT editor may be used.

(b) About commas within data

1) When spreadsheet software is used
Commas may be used within strings such as Statement and Comment.
2) When a TEXT editor is used
Insert double quotations before and after the string in which commas are used, when import the string to GX Developer.
When the GX Developer export strings that include commas, it will insert double quotations before and after the strings.

(c) About double quotations

The GX Converter recognizes and converts string data as shown below:

CSV file (within file)		GX Developer (Statement, Comment, etc.)
AB	⇔	AB
"A,B"	⇔	A,B
""AB""	⇔	"AB"
"""AB""C"""	⇔	"AB"C"

CAUTION

About double quotations in CSV format
There may be some cases in which strings in CSV files created using GX Converter are not correctly recognized or converted by some spreadsheet products available on the market.
When this happens, perform necessary actions by referring to the manual of the spreadsheet software.
Or, this problem can be resolved by opening the CSV file using a TEXT editor and adding or removing double quotations as necessary.

POINT

(1) GX Converter cannot be started up with projects using labels.
(2) When the TEXT, CSV format file is being import by GX Developer
- Using the same file formats for import a TEXT, CSV format file using GX Developer and export to TEXT, CSV format file will make the subsequent operations easier.
- When creating a List using commercial software, the Step number need not be input, since the GX Developer adds new Step number each time is r import data.

(3) When export a List or Device comments to a TEXT, CSV format file
- The file format cannot be changed at this time.
  Change the file format using a commercial software package after the data export to the TEXT, CSV format file has been completed.

6 - 2

6.2 File formats when the GX Developer import a TEXT, CSV format file

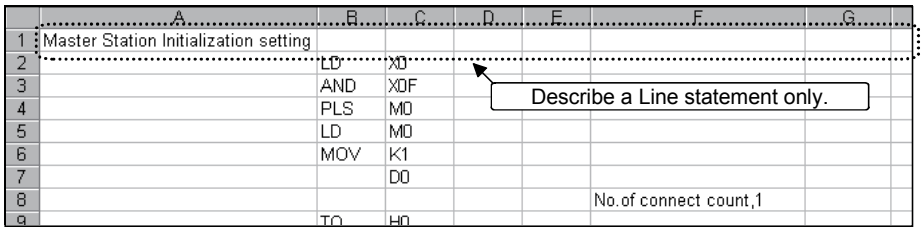
This section explains the file formats used when the GX Developer import a TEXT, CSV format file.

POINT

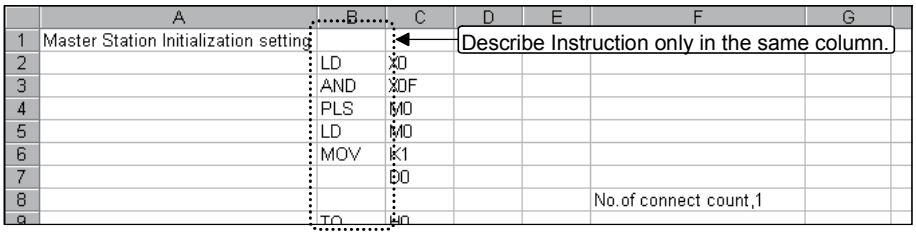
GX Converter recognizes up to 17 columns of data and will not recognize data in the 18th column and beyond.
Therefore, when creating data using a TEXT editor or spreadsheet, create it using 17 columns or less.
GX Converter recognizes up to 524288 lines.

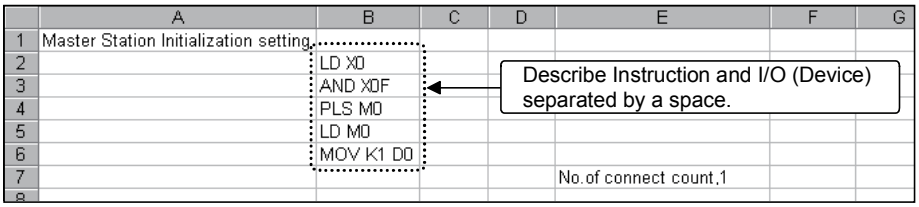
6.2.1 When a List is import by the GX Developer

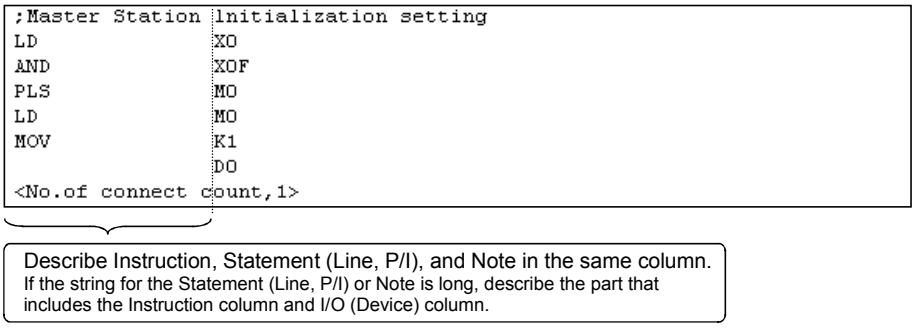
The following explains how to describe each column data format.

Column data format	Description
Step number	(1) No description necessary (Automatically added when performing conversion to GX Developer format.)
Line statement	(1) Describe Statement strings only. • Describe only the Statement; e.g. "Master Station Initialization setting". A conversion error will occur if a semicolon (;) is inserted before a Statement string.  (2) Up to 64 characters can be used. (3) When the CPU type of the GX Developer project is A Series, FX Series or Motion (SCPU) • All descriptions become Separate statement. A conversion error will occur if a " * " is inserted before a Statement string. (4) When the CPU type of the GX Developer project is QnA Series • Enter an " * " in front of a Statement string to make it a Separate statement; e.g. "Master Station Initialization setting". The " * " in front of strings that denotes a Separate statement is not counted as the number of characters. (5) If there is a mixture of Line statement, P/I statement and Note in the same line, a conversion error will occur.

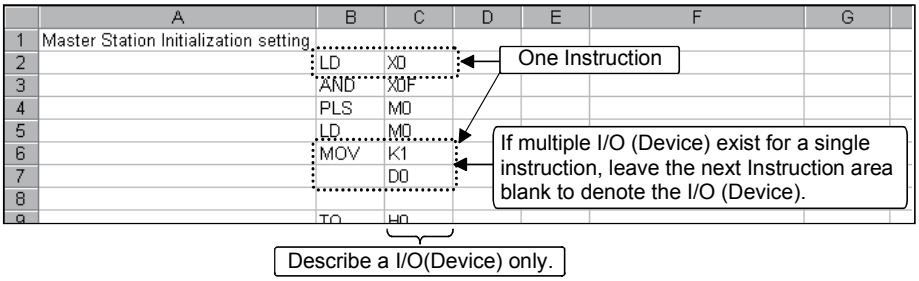
<table>
<tr><th>Column data format</th><th>Description</th></tr>
<tr><td>Instruction

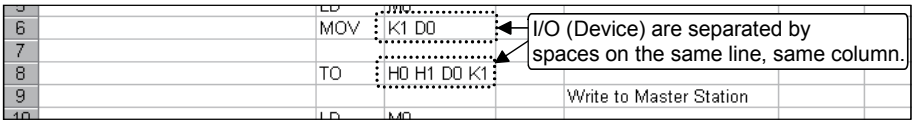
(CSV format)</td><td>(1) Describe Instruction.
• Conversion cannot be performed if data to be the Instruction does not exist. Do not omit Instruction.
 

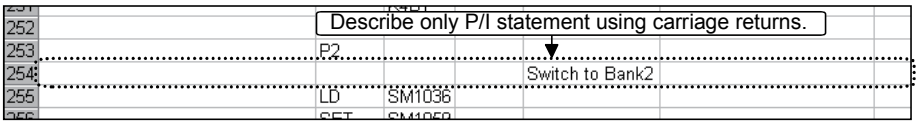
(2) Instruction and I/O (Device) can be described in the same column.
(When performing conversion, set the column data format to "Instruction" in the "Set column data.")
 
</td></tr>
<tr><td>Instruction,
Statement (Line, P/I),
Note

(Text format)</td><td>(1) Describe Instruction, Statement (Line, P/I) and Note in the same column.
• Conversion cannot be performed if data to be the instruction does not exist. Do not omit Instruction.
(Description as shown in (2) in the Instruction section above is not allowed.)
• Insert " ; " for Line statement, " [ ] " for P/I statement, and " < > " for Note in before each data or before and after each data (to identify each data).
 

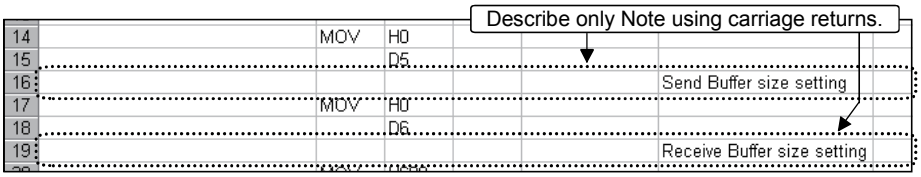
(2) Number of characters allowed for description (" ; ", " [ ] " and " < > " are excluded from the number of characters used.)
• Up to 64 characters may be used for a Line statement.
• Up to 64 characters may be used for a P/I statement.
• Up to 32 characters may be used for a Note.
(3) When the CPU type of the GX Developer project is A Series, FX Series or Motion (SCPU)
• All descriptions become Separate statement (Line, P/I) or Separate note.
A conversion error will occur if a " * " is inserted before a Statement (Line, P/I) string or Note string.
(4) When the CPU type of the GX Developer project is QnA Series
• Enter an " * " in front of each string to make it a Separate statement (Line, P/I) or Separate note.
The " * " in front of strings that denotes a Separate statement (Line, P/I) or Separate note is not counted as the number of characters.</td></tr>
</table>

<table>
<tr><th>Column data format</th><th>Description</th></tr>
<tr><td>I/O (Device)</td><td>(1) Describe I/O (Device) only.
 

(2) Multiple I/O (Device) can be described in the same line.
 

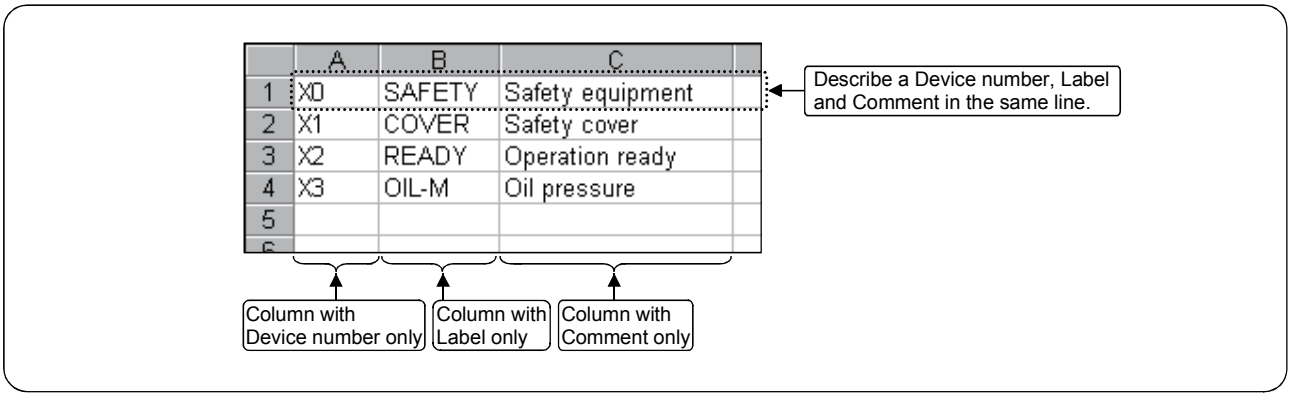
(3) I/O (Device) can be described in the Instruction column.
• See (2) in the description for Instruction shown above.</td></tr>
<tr><td>P/I statement</td><td>(1) Describe P/I statement strings only.
• Describe P/I statement only; e.g. "Switch to bank 2."
 

(2) Up to 64 characters can be used.
(3) When the CPU type of the GX Developer project is A Series, FX Series or Motion (SCPU)
• All descriptions become Separate P/I statements.
A conversion error will occur if a " * " is inserted before a Statement string.
(4) When the CPU type of the GX Developer project is QnA Series
• Insert an " * " in front of each string to make it a Separate P/I statement; e.g. "*Switch to bank 2." The " * " in front of strings that denotes a Separate P/I statement is not counted as the number of characters.
(5) About P/I statement errors
If there is no corresponding Instruction in the previous line of the P/I statement, a conversion error will occur.
Also, if the Conversion type for wrong instruction is set to "To invalid instructions" in the "Set export destination data", they will not be converted to invalid instructions.
(6) If there is a mixture of Line statement, P/I statement and Note in the same line, a conversion error will occur.</td></tr>
</table>

Column data format	Description
Note	(1) Describe Note strings only. • Describe Note only; e.g. "Send Buffer size setting."  (2) Up to 32 characters can be used. (3) When the CPU type of the GX Developer project is an A Series, FX Series or Motion (SCPU) • All descriptions become Separate note. A conversion error will occur if a " * " is inserted before a Note string. (4) When the CPU type of the GX Developer project is a QnA Series • Insert an " * " in front of each string to make it a Separate note; e.g. "*Send Buffer size setting." The " * " in front of strings that denotes a Separate note is not counted as the number of characters. (5) About Note errors If there is no corresponding Instruction in the previous line of the Note, a conversion error will occur. Also, if the Conversion type for wrong instruction is set to "To invalid in striation" in the " Set export destination data ", they will not be converted to invalid instruction. (6) If there is a mixture of Line statement, P/I statements and Note in the same line, a conversion error will occur.

6.2.2 When device comments are import by the GX Developer

The following explains how to describe each column data format.



Column data format	Description
Device number	(1) Describe Device number. Conversion cannot be performed if a Device number is not listed. Always enter this field.
Label	(1) Describe Labels. • If the Device number area is left blank or invalid device is input, the line will not be registered. (2) Up to 8 characters can be entered.
Comment	(1) Describe Comment. • If the Device number area is left blank or invalid device is input, the line will not be registered. (2) Up to 32 characters can be entered.

CAUTION

Always enter a Device number.
Use one of the following combinations:
1) Device number, Label, Comment
2) Device number, Comment
3) Device number, Label

6.3 File Formats When The GX Developer Format Data is Export to a Text, CSV Format File

This section explains the file formats used when the GX Developer data is export to a TEXT, CSV format file.

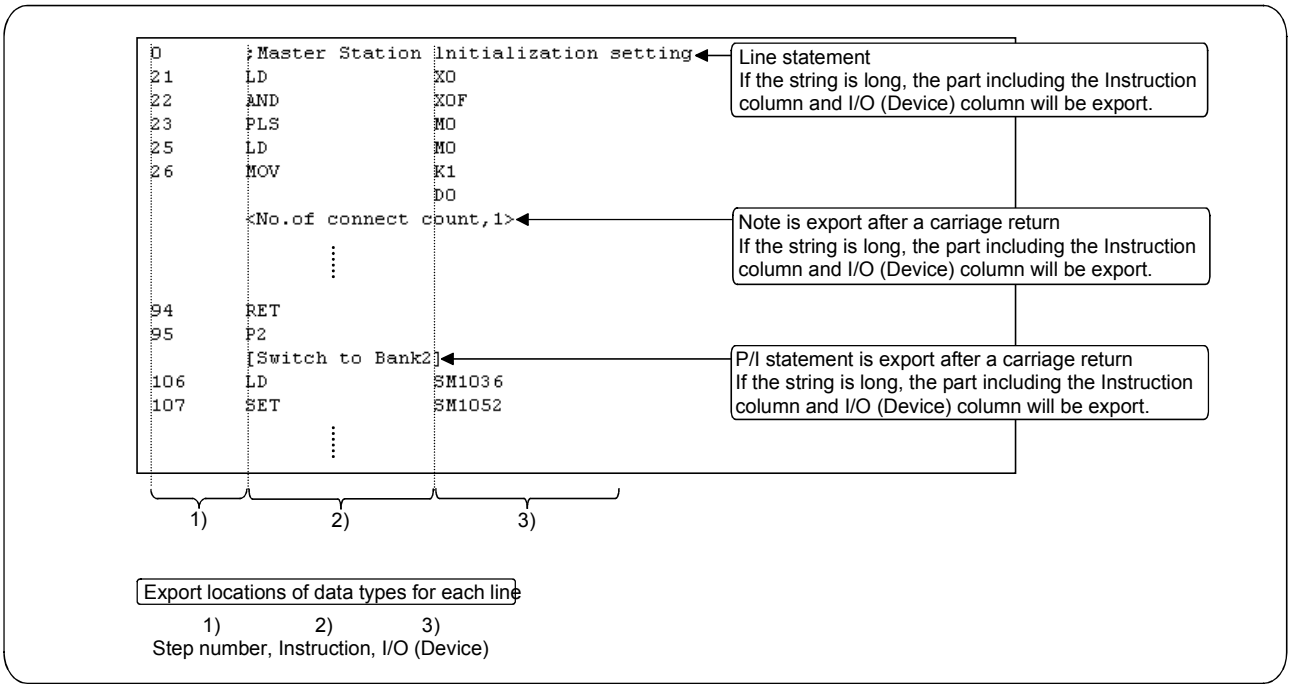
6.3.1 When a List is export to a text, csv format file

POINT

If the CPU type of the GX Developer project is A Series, FX Series or Motion (SCPU), a
" * " is displayed for Statement (Line, P/I) and Note in the GX Developer. However, when the data is export to a TEXT, CSV format file, the " * " is eliminated.

(1) TEXT format file (delimited by spaces)

A List is export to a TEXT format file using the format shown below:

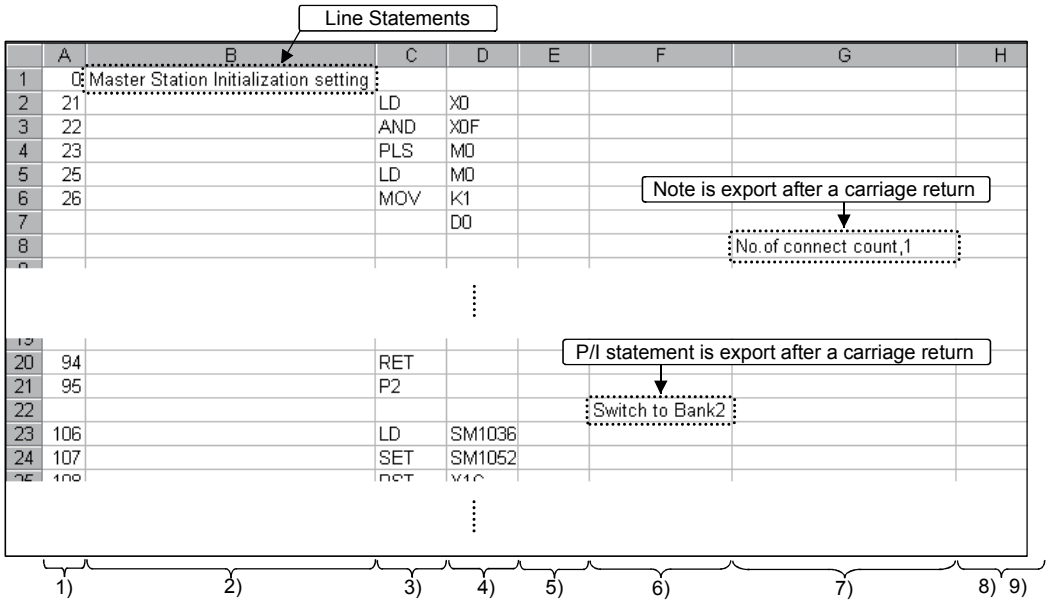


REMARK

For Line statement, P/I statements and Note, " ; ", " [ ] " or " < > " is inserted before each string or before and after each string.
They are export in the Instruction column 2).

(2) CSV format file (delimited by commas)

A List is export to a CSV format file using the format shown below:



Export locations of data types for each line

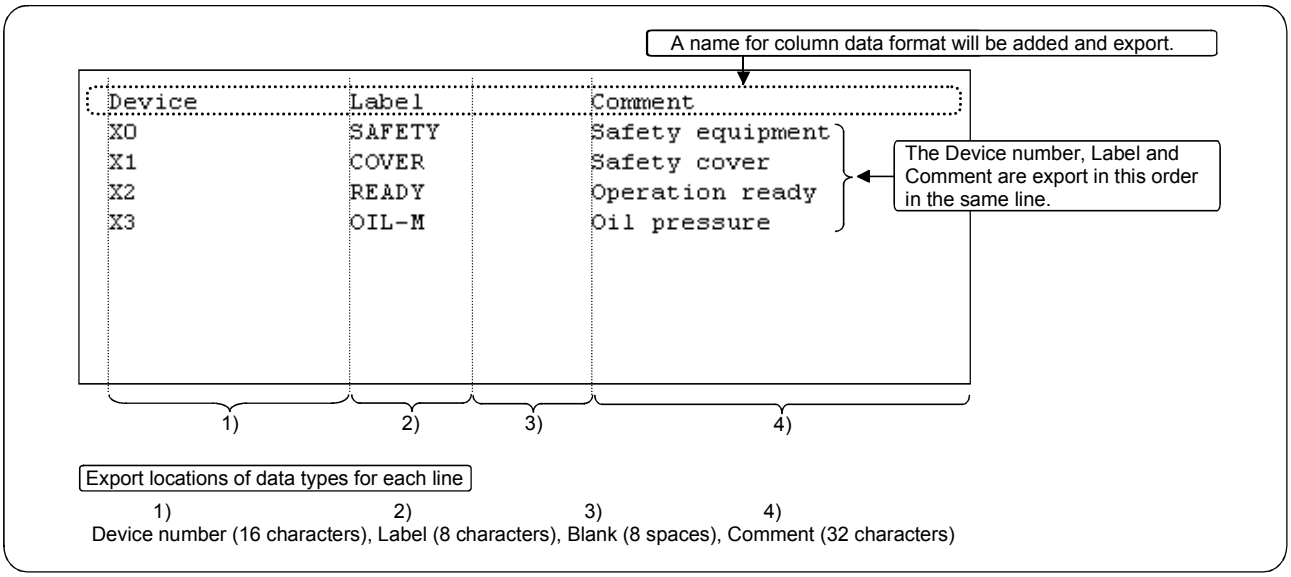
1) 2) 3) 4) 5) 6) 7) 8) 9)

Step number, Line statement, Instruction, I/O (Device), Blank, P/I statement, Note, Blank, Blank

6.3.2 When device comments are export to a text, csv format file

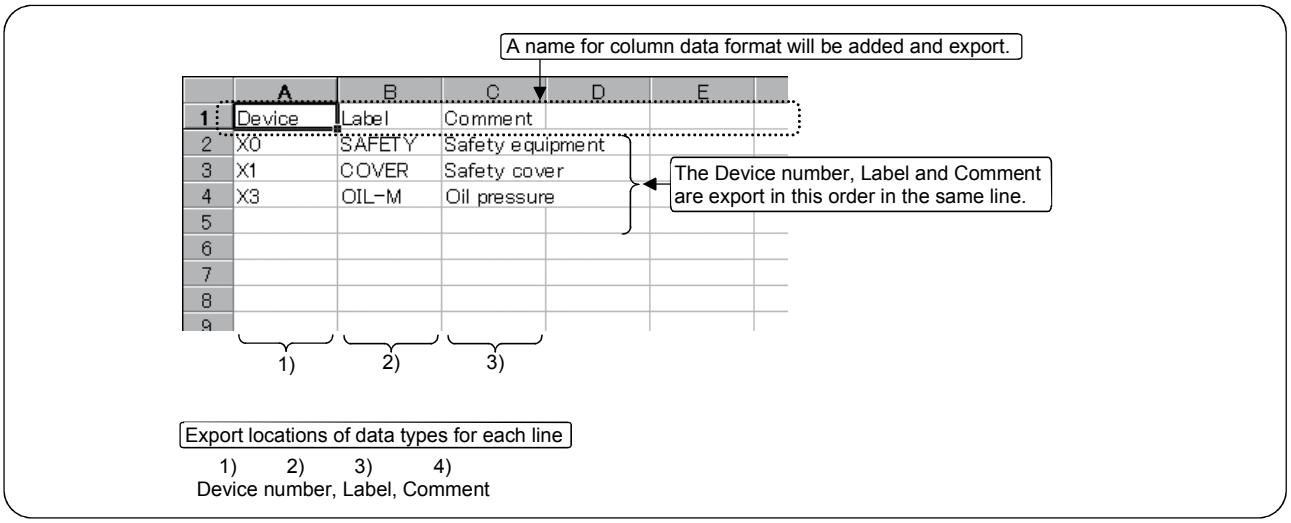
(1) TEXT format file (delimited by spaces)

Device comments are export to a TEXT format file using the format shown below:



(2) CSV format file (delimited by commas)

Device comments are export to a CSV format file using the format shown below:



POINT

A device will not be written if both of the corresponding label and comment are not set.

Therefore, the device X2 in (2) above will not be written, as the corresponding settings are not made.

APPENDICES

Appendix 1. Limitations and Precautions

(1) The following explains the limitations and precautions when import TEXT, CSV format data to the GX Developer.

Item	Description
While GX Converter is running	Conversion cannot be performed during monitoring using GX Developer.
	Conversion cannot be performed while GX Simulator is running in GX Developer.
	Conversion cannot be performed when the GX Converter is running without any open project.
	GX Converter cannot be used when "Use label" is selected while creating a new project on GX Developer.
CPU type	When the GX Developer import TEXT, CSV format data, there may be some cases in which Instruction and I/O (Device) cannot be converted, depending on the CPU type of the project opened in GX Developer. See "GX Developer Operating Manual" for details.
Data name	There is a limitation in data names when the PLC type of the GX Developer project is A Series, FX Series, or Motion (SCPU). See "GX Developer Operating Manual" for details.
Column data format	When converting a List, the data type of the Instruction must be present within the conversion data. Otherwise, conversion cannot be performed.
	When converting Device comments, the data type of the Device number must be present within the conversion data. Otherwise, conversion cannot be performed. In addition, describe Device number and either Comment or Label.
Device comments	To save the conversion processing time, describe the Device number in ascending order within the TEXT, CSV format data. Conversion is also possible when they are not in the ascending order. When Device numbers are entered randomly, it takes longer to read Device comments compared to when they are entered in ascending order.
Conversion row setting	The input range for Start import at row and End import at row is 1 to 524288. The default End import at row is blank. When the End import at row is blank, conversion is performed up to the last row.
Data Preview area	When CSV format is specified, the data for the 18th column and beyond will be displayed as " , " in the Data Preview area.

APP

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(2) The following explains the limitations and precautions when export GX Developer format data to TEXT, CSV format data.

Item	Description
While GX Converter is running	Conversion is possible even during monitoring using the GX Developer.
	Conversion is possible even while GX Simulator is running in GX Developer.
	Conversion cannot be performed when GX Converter is running without any open project.
	GX Converter cannot be used when "Use label" is selected while creating a new project on GX Developer.
Delimiter	The delimiter is a comma when export using TEXT format, and a space when export using CSV format.

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Appendix 2. Conversion Error Message List

The following explains conversion error messages when the GX Developer is import TEXT, CSV format data.

While converting a List

Message	Corrective action
The specified data cannot be created.	Verify the CPU type and parameter settings. <Cause> • The program capacity was not set for the specified program name. • An addition was attempted exceeding the maximum number of programs.
The program capacity has been exceeded.	Verify the data being converted. (The converted data is stored while the capacity allows.)
The instruction or device is incorrect. (nth Line)	Correct the data being converted and retry. (When an Instruction uses multiple lines, the line number within the parentheses indicates the first line.)
The device is incorrect. (nth Line)	Correct the data being converted and retry. (When an Instruction uses multiple lines, the line number within the parentheses indicates the first line.) <Cause> • A Device that cannot be used is specified. • There is an error in the index qualification or digit specification. • There is an error in the setting for a special function module device or link direct device.
The device number exceeds the usable range. (nth Line)	Correct the data being converted and retry. (When an Instruction uses multiple lines, the line number within the parentheses indicates the first line.)
A Statements should be 64 characters or less. (nth Line)	Verify the position in which the number of characters has been exceeded. (Characters up to the 64th character have been recorded.)
A Note should be 32 characters or less. (nth Line)	Verify the position in which the number of characters has been exceeded. (Characters up to the 32nd character have been recorded.)
A Comment should be less than 16 or 32 characters. (nth Line)	Verify the position in which the number of characters has been exceeded. (Characters up to the 32nd (16th) character have been recorded. The maximum number of allowable characters will differ depending on the option information in the GX Developer.)
Statement or note cannot be converted. (nth Line)	Correct the data being converted and retry.
Separate statement or note cannot be converted. (nth Line)	If the header character is an " * ", change it to " ** " and retry.
Convert error counter is over 100. Cancelled over 100 errors.	Correct the conversion errors and retry.

While converting Device comments

Message	Corrective action
The device comment already exists. (nth Line)	Correct the duplicate comments and retry. (The last Device will be valid.)
The device is incorrect. (nth Line)	Correct the invalid Device and retry.
Comments should be less than 16 or 32 characters. (nth Line)	Verify the position in which the number of characters has been exceeded. (Characters up to the 32nd (16th) character have been recorded. The maximum number of allowable characters will differ depending on the option information in the GX Developer.)
Labels should be 8 characters or less. (nth Line)	Verify the position in which the number of characters has been exceeded. (Characters up to the 8th character have been recorded.)
Convert error counter is over 100. Cancelled over 100 errors.	Correct the conversion errors and retry.

Appendix 3. Converting CADIF Character-string Data

This section explains the operation to import the character-string data file that has been converted via SW1IVD-CADIF, to the GX Developer.

(1) When converting a List

Convert a List using TEXT format while taking care of the following settings:

- Separate between the number column and Instruction column in "Set delimiter location."
- In "Set column data," set the first column to "Do not Import (Skip)" and the second column to "Instruction."

(2) When converting Device comments

Convert Device comments using CSV format while taking care of the following settings:

- Decrease the End import at row by 1 using the spin button in the "Set conversion source data."
- Set " ; " (semicolon) as the column delimiter in "Set delimiter location."
- In "Set column data," set the first column to "Device number" and the second column to "Comment."

Appendix 4. Performance Specifications

The following explains the performance specifications for GX Converter.

Conversion element		Conversion time
TEXT fomat data to GX Developer fomat data	List	5 seconds
	Device comments	
CSV fomat data to GX Developer fomat data	List	5 seconds
	Device comments	
GX Developer fomat data to TEXT d fomat ata	List	5 seconds
	Device comments	
GX Developer fomat data to CSV fomat data	List	5 seconds
	Device comments	

The computer used for the measurements above
CPU: Pentium® 133 MHz, RAM: 32 MB, Free hard disk space: More than 50 MB,OS: Windows® 95
Conversion data List : 1001 steps (LD X0 OUT M0 x 500 times, END)
Device comments : 1000 Device equivalent
(Comment 32 characters, Label 8 characters)

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GX Converter Version 1

Operating Manual

MODEL	SW0D5-CNVW(OPE)-E
MODEL CODE	13J949
IB(NA)-0800004-H(0802)MEE	

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE : TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN
NAGOYA WORKS : 1-14 , YADA-MINAMI 5-CHOME , HIGASHI-KU, NAGOYA , JAPAN

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