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GPP Function software for Windows SW2D5C-GPPW-E SW2D5C-LLT-E SW2D5F-GPPW-E SW2D5F-LLT-E

Operating Manual (Startup)



Mitsubishi Programmable Controller

— SOFTWARE USER REGISTRATION —

After agreeing to the terms of the Software License Agreement included in the package, make the necessary entries in the Software User Registration Card and mail it to us to receive the following services. We register users according to the received Software Registration Card and send the user ID and registration confirmation. (User registration is free of charge.)

1. Software Registration

Mail the Software User Registration Card included in the package, and you will receive direct mail for the latest information such as the new product release, version upgrade information, event information, etc.

2. Notes on Contact

Call our GPPW telephone center and tell us your product ID before asking questions.

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.

Revisions

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

Print Date	*Manual Number	Revision		
Sept,1998	IB(NA)-66878-A	First edition		
Oct, 1998	IB(NA)-66878-B	Correction		
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Introduction

Thank you for purchasing the Mitsubishi general-purpose MELSEC series sequencer. Read this manual and make sure you understand the functions and performance of MELSEC series sequencer thoroughly in advance to ensure correct use. Please make this manual available to the end user.

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About Manuals

The following lists the manuals for this software package. Refer to the following table when ordering manuals.

Related Manuals

Manual Name	Manual No. (Model Code)
GPP Function Software for Windows SW2D5C-GPPW-E / SW2D5F – GPPW-E Operating Manual Describes the online functions of SW2D5 - GPPW-E including the programmiong	1B-66877-A
procedure, printing out procedure, monitorring procedure, and debugging procedure. (Packed with the product.)	(13J937)
Ladder Logic Test Function Software for Windows SW2D5C-LLT -E / SW2D5F – LLT -E Operating Manual.	1B-66877-A
This manual gives a product summary, device memory monitoring and setting / operating methods for machine simulation (Sold separately.)	(13J936)
GPP Function Software for Windows SW2D5C-GPPW -E / SW2D5F – GPPW-E	
SW2D5C-LLT / SW2D5F-LLT –E PPW –E Starting GPPW This manual is intended for beginners of the SW2D5C-GPPW, SW2D5F - GPPW, SW2D5C-	SH-4006
LLT and SW2D5F-LLT. It describes how to install and start them and provides you with a basic knowledge and the methods for creating and editing circuits, making printouts,	(13J939)
monitoring, and debugging showing a few illustrations.	Ĩ
(This manual comes with the software package.)	

Note: This guide book is helpful when mastering the general operations of the GPP function software package in a few hours.

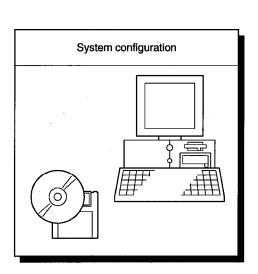
NOTICES

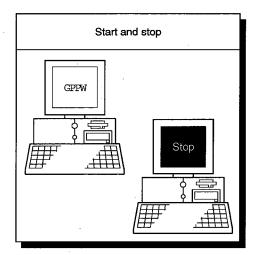
- We don't guarantee the commercially-available Windows-based software products that have been introduced in this manual.
- We hold the copyrights of this software package.
- No part of this manual may be transcribed or duplicated in any form without prior permission by Mitsubishi Electric Corporation.
- We have attempted to cover all the revisions of software and hardware, but this manual may not contain the latest revisions.
- We assume that one software package will be used on single machine.
- 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.

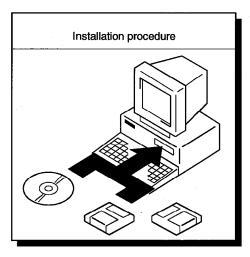
1. GENERAL DESCRIPTION

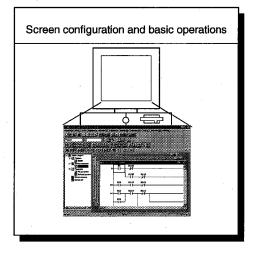
This manual describes the system configuration, installation procedure, start method, screen configuration, and basic operations of the following Windows compatible products.

- SW2D5C-GPPW-E GPP Function Software Package (CD-ROM Version)
- SW2D5F-GPPW-E GPP Function Software Package (FD Version)
- SW2D5C-LLT-E Ladder Logic Test Tool Function Software Package (CD-ROM Version)
- SW2D5F-LLT-E Ladder Logic Test Tool Function Software Package (FD Version)







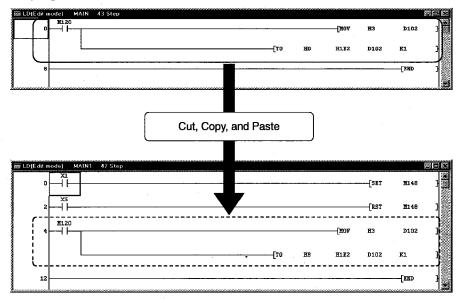


1.1 Features

- (1) Compatibility with Windows Operations are simple and easy because they conform with the Windows standard interfaces (toolbar, shortcut key, clicking with the right mouse button). (2) Availability of list representations (mnemonic codes) on the screen creation window List representations can be directly input to the circuit input dialog box for circuit creation. The tool buttons, menu buttons, and function keys can be used for circuit creation. ۵ Enter symbo 8 遭 💌 LD X3 CK Est п (3) Assignment of GPPA, GPPQ, and MEDOC function keys GPPW can be set for GPPA, GPPQ, and MEDOC function key assignments. This allows users of the previous packages to use this software package without difficulty. GPPA format GPPQ format MEDOC format
- Windows, Word, and Excel are the trademarks or the registered trademarks of Microsoft Corporation.
 The company name and product name in this manual are the trademarks or the registered trademarks of the respective company.

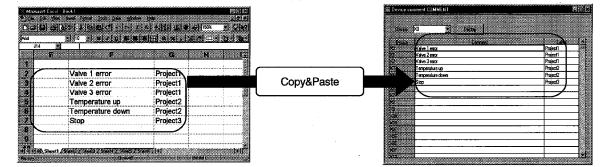
(4) Common use of circuits among multiple projects and program data

Cut, copy, and paste operations can be performed among multiple projects and program data and circuits can be shared.



(5) Common use of comments created by spreadsheet programs or word processing programs

The data created by spreadsheet programs (Excel, etc.) or word processing programs (Word, etc.) can be used as comments by copy and paste operations.



(6) Off-line debugging

The logic test function (LLT) can be used for debugging on a single personal computer without connecting a PLC.

POINT

The logic test function (LLT) is sold as a program product. This program must be purchased separately for off-line debugging.

1.2 Abbreviations and Terms in This Manual

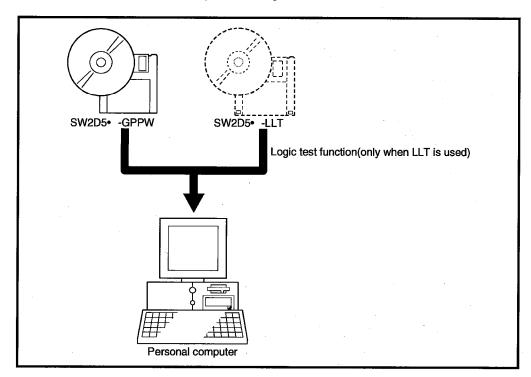
Abbreviation or Term	Description		
Windows	Abbreviation for Microsoft Windows 95 or Windows NT 4.0		
SW2D5C-GPPW	Abbreviation for SW2D5C-GPPW-E GPP Function Software Package		
SW2D5F-GPPW	Abbreviation for SW2D5F-GPPW-E GPP-E Function Software Package		
GPPW	Generic term for SW2D5C-GPPW-E and SW2D5F-GPPW-E GPP Function Software Packages		
SW2D5C-LLT	Abbreviation for SW2D5C-LLT-E Ladder Logic Test Tool Function Software Package		
SW2D5F-LLT	Abbreviation for SW2D5F-LLT-E Ladder Logic Test Tool Function Software Package		
Logic test function (LLT)	Generic term for SW2D5C-LLT-E and SW2D5F-LLT-E Ladder Logic Test Tool Function Software Packages		

Unless otherwise stated, this manual uses the following abbreviations and terms.

2. SYSTEM CONFIGURATION

2.1 System Configuration

The following figure shows the system configuration.



2.2 Operating Environment

The following table summarizes the operating environment.

ltem	Contents		
Computer main unit	Pentium (133 MHz or faster recommended) based personal computers that are compatible with Windows operating system		
Operating system	Windows95 or WindowsNT4.0		
Required memory	32MB or more (recommendation)		
Required hard disk space	100MB or more		
Disk drive	3.5-inch (1.44MB) floppy disk drive CD-ROM drive (if using CD-ROM media)		
Monitor	Resolution 800x600 pixels or higher		

3. INSTALL AND UNINSTALL

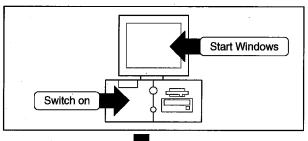
This chapter describes how to install and uninstall the GPPW and logic test function (LLT).

3.1 Install

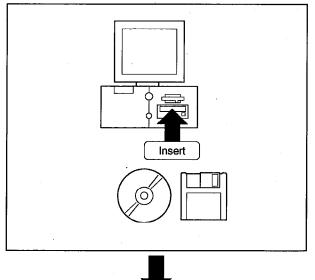
This section describes the installation method (common to both GPPW and logic test function (LLT)).

POINTS

- Terminate all the other applications running under Windows before installation.
- When using Windows NT4.0, log on as a user with the administrator attributes (for computer administration).
- When installing the logic test function (LLT), install GPPW first.
- In case of re-installation, uninstall GPPW&LLT before starting installation.
- SW2D5C-GPPW, SW2D5F-GPPW, SW2D5C-LLT and SW2D5F-LLT are Windows 95 and Windows NT4.0 applications.
- If Windows NT4.0 is running on your computer, use SW1D5C-GPPW, SW1D5F-GPPW, SW1D5C-LLT, SW1D5F-LLT or later. The operation of SW0D5□-GPPW and SW0D5□-LLT is not guaranteed.

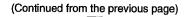


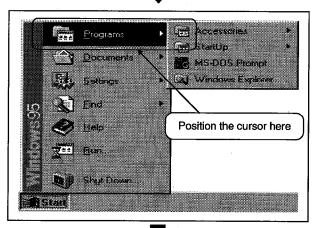
1) Turn on the personal computer, then start Windows.



- 2) Confirm that Windows has been started, then insert the disk in the drive.
 - For FD version Insert the first FD in the floppy disk drive.
 For CD-ROM version
 - Insert the CD-ROM in the CD-ROM drive.

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3) Click the [Start] button and move the cursor onto the [Programs] menu.

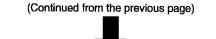


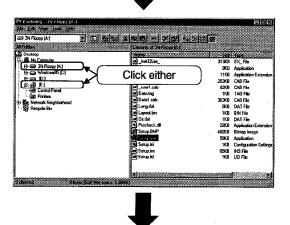
4) Select the [Windows Explorer] menu item.



POINT

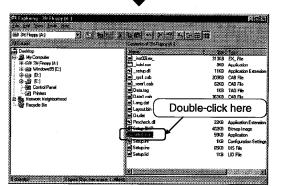
This manual uses the Windows 95 screens for descriptions. The names and screens of Windows 95 may differ from those of Windows NT4.0.



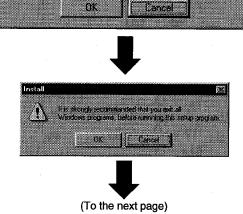


- 5) Click the icon of the drive containing the installation disk.
 - For FD version Click the FD drive.
 - For CD-ROM version Click the CD-ROM drive.

6) Double-click the "Setup.exe" icon.



7) When the message to the left is displayed on the dialog box, click the [Cancel] button to exit from installation. Then uninstall the currently installed GPPW, and start installation again.



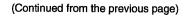
GPP for Windows is already installed When you continue this setup program when Setup can not install correctly as the case may be

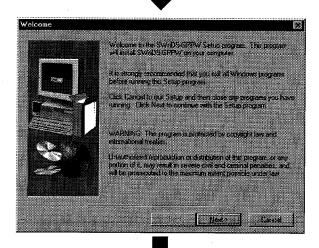
Install

8) When the message to the left is displayed, click [OK] if all other applications are already closed. If not, click [Cancel] to exit installation. Then close all the running applications and start installation again by following the step 3) and subsequent steps.

X

User Informat





9) When the dialog box to the left is displayed, check the contents of the message and click [Next>].

- Provide the same backwith the must also type the same of the
- 10) Enter the name and company name, then click the [Next >] button.

- Registration Confirmation

 You have provided the following registration information.

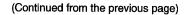
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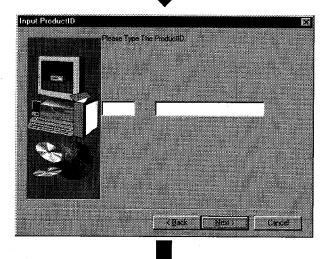
 Company:
 MITSUBISHI

 Is this registration information.correct?

 Yes
 No
 - (To the next page)

11) Check the registered name and company name.If they are correct, click the [Yes] button.If they have to be corrected, click the [No] button.The previous screen is displayed again.





 Enter the product ID and click the [Next >] button. The product ID is printed on the Software User Registration Card.

- Choose Destination Location
 Setup will ended SW1D5-GPAv £ in the following folder.

 The state to different tolder , click Bourse and setup out in fullier.
 To match to different tolder , click Bourse and setup out in fullier.

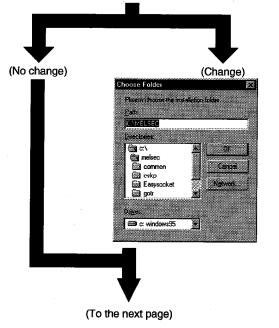
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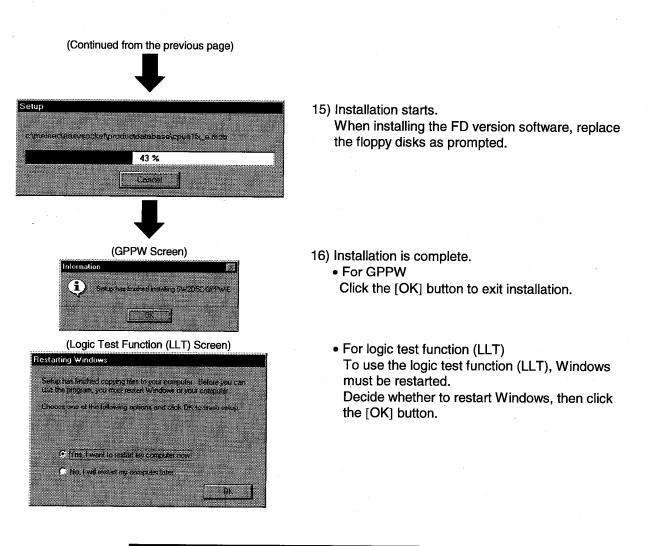
 Out Destendance Fidder.
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 K Back
 Next Y
 Cancel
- 13) Specify a destination folder for installation.
 The default installation folder is C:\MELSEC\.
 To use the default folder, click the [Next >] button.
 To change the installation folder, click the [Browse...] button.



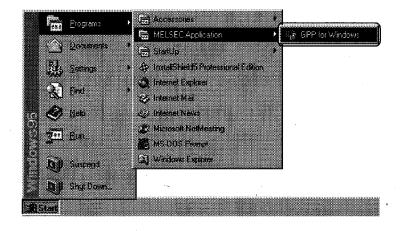
14) Select the desired drive and/or folder to be designated as the destination folder, then click [OK].

The screen to the left is not displayed when the installation folder need not be changed.



POINT If the installation fails, uninstall (see Section 3.4) the system, then install it again.

3.2 Icon Registration



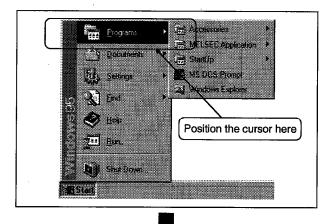
When GPPW is installed, the following icons are registered.

POINT

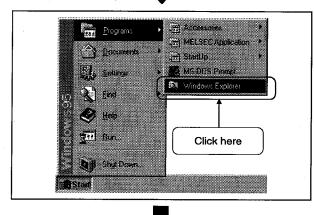
Because the logic test function (LLT) is always started from GPPW, icons are not registered for the LLT.

3.3 Method for Creating Shortcut Icons

This section describes how to create shortcut icons on the Windows desktop. The following example assumes that GPPW has already been installed to C:\MELSEC\GPPW\.



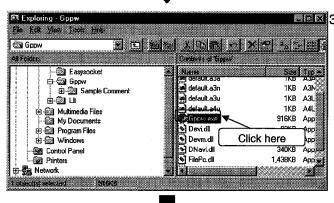
1) Click the [Start] button, then move the cursor onto the [Programs] menu.



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2) Select the [Windows Explorer] menu item.

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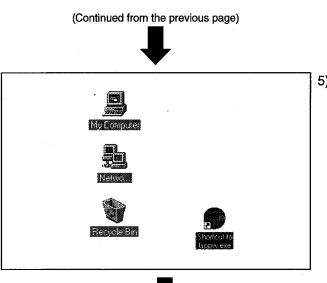


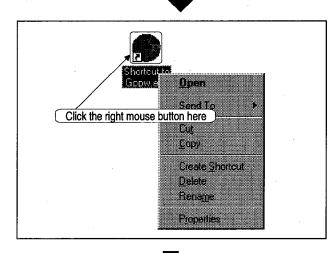
3) The Explorer starts.

Select the "C" drive-"MELSEC" folder-"GPPW" folder in the left pane, and click the "Gppw.exe" icon to select.

- Convert of interest
 - Drag the selected "Gppw.exe" icon onto the desktop, and place it at any location.

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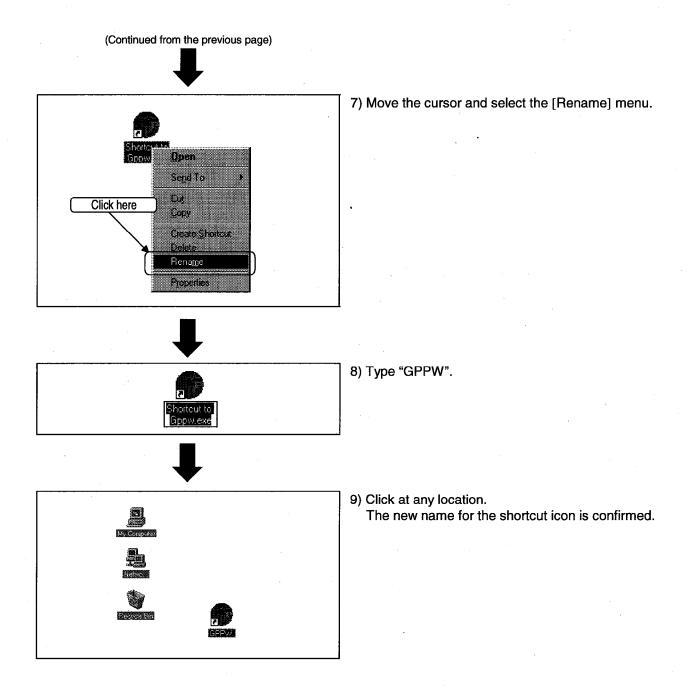




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5) The shortcut icon is created on the desktop.

6) Rename the shortcut icon. The example given here shows the procedure to change the name to "GPPW".
Locate the cursor at the created shortcut icon and click with the right mouse button. The pop-up menu appears.



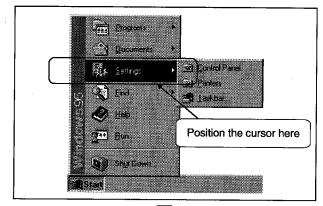
3 - 11

3.4 Uninstall

This section describes how to remove the GPPW and logic test function (LLT) from the hard disk.

POINTS

- Before uninstalling the GPPW and logic test function (LLT), close all the applications in advance.
- When uninstalling SWnD5-GPPW and SWnD5-LLT, uninstall SWnD5-LLT before SWnD5-GPPW.



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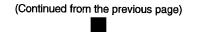
Start

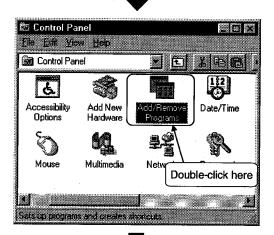
🎝 🗊 Shu Down.

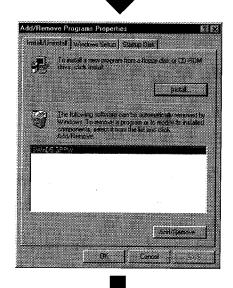
1) Click the [Start] button, then move the cursor onto the [Settings] menu.

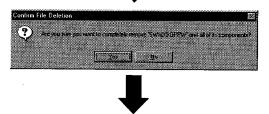
2) Select the [Control Panel] menu item.

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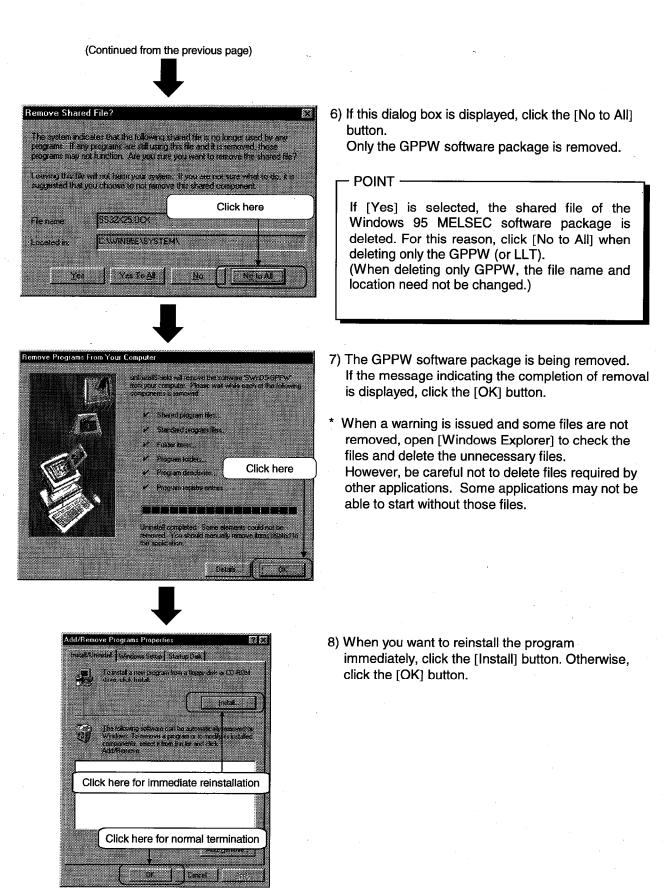
(To the next page)

3) The control panel is displayed. Double-click the [Add/Remove Programs] icon in the control panel window.

- 4) Select the software package to be removed.For GPPW
 - Select "SWnD5-GPPW".For logic test function (LLT)
 - For logic test function (LL1) Select "SWnD5-LLT".

After selecting the software package, click the [Add/Remove ...] button.

- * Step 5) and the subsequent steps refer to SWnD5-GPPW, but the procedure is the same for SWnD5-LLT.
- 5) You will be prompted for the confirmation of the removal of the software package.
 To remove the software package, click the [Yes] button. Then the removal starts.
 To exit without removing the software package, click the [No] button. The preceding dialog box will be displayed.
- * A component refers to the installed files and icons.



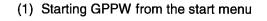
3 - 14

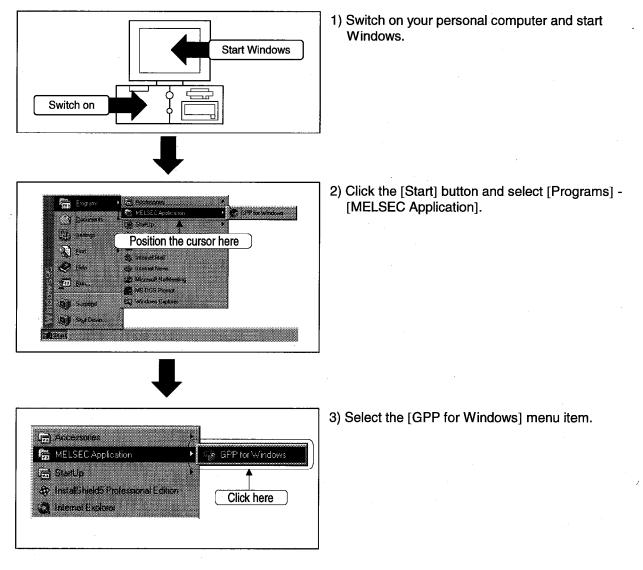
4. USING GPPW

4.1 Starting and Quitting GPPW

This chapter describes how to start and quit GPPW.

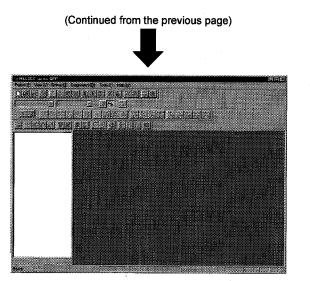
4.1.1 Starting GPPW





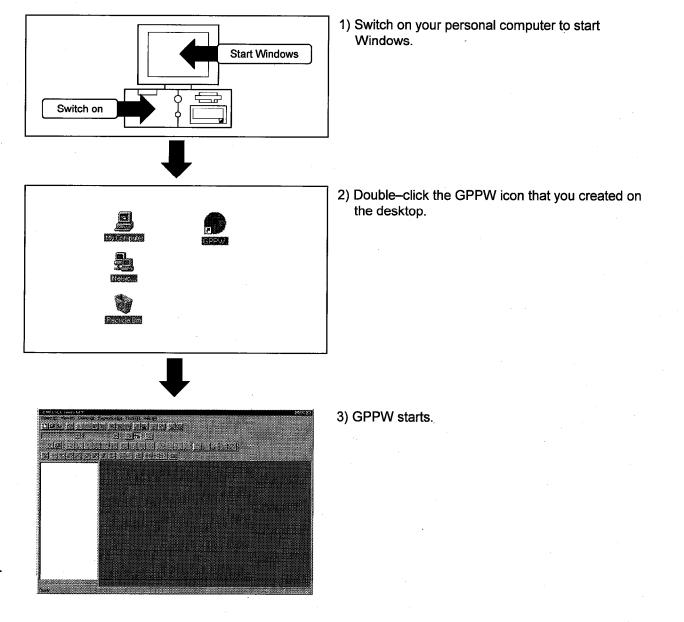
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4. USING GPPW

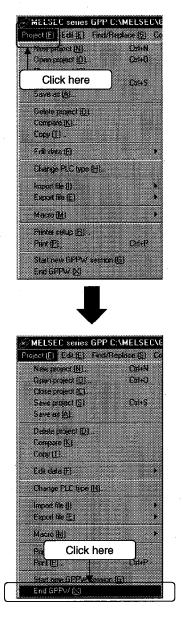


4) GPPW starts

(2) Starting GPPW from the shortcut icon



4.1.2 Quitting GPPW



- (1) Quitting GPPW from the project menu
 - 1) Select the [Project] menu.

2) Select the [End GPPW] menu item. GPPW is closed.

20

- Click here MELSEC series GPP (Unset project) Project (E) Edit (E) Find/Replace (S) MELSEC series GPP (Unset project) - [LD(Edit Find/Replace [S] Convert [C] menu. Hestore GPPW is closed. Move 🖹 🖸 🖉 👧 🚇 ee. Click here T٩ Maximize 🛓 44 Close Alt+F4
- (2) Quitting GPPW from the Windows menu
 - 1) Click the program icon 💽 on the title bar.

 Select the [Close] menu item from the Windows menu.
 GPPW is closed

4.2 Starting and Quitting the Logic Test Function (LLT)

This section describes how to start and quit the logic test function (LLT).

4.2.1 Starting the Logic Test Function (LLT)

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LADDER LOGIC TEST TOOL

Q4A

SWITCH

STDP
 RUN

C STEP BUN

Stat(E) Tools [] Help(H)

RUN ERROR USER

NDICATOR RESET

RESET

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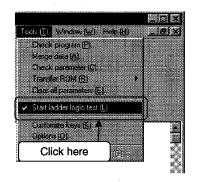
This section describes how to start the logic test function (LLT). All the explanations are given assuming that GPPW has already been started.

> Open the project to be debugged with GPPW. (Refer to the –SW1D5□-GPPW Operating Manual for details)

2) Select [Tools] - [Start ladder logic test] on GPPW.

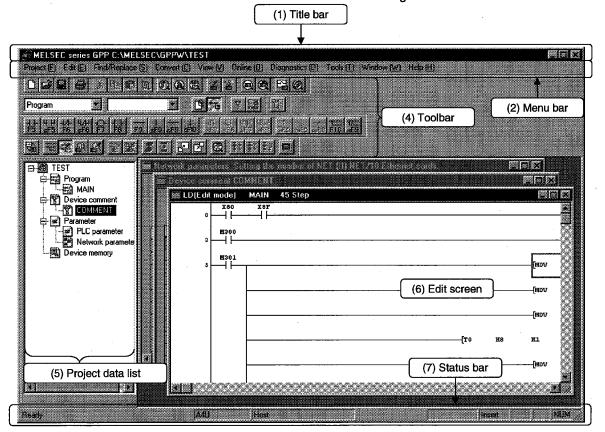
3) The logic test function (LLT) starts.

4.2.2 Quitting the Logic Test Function (LLT)

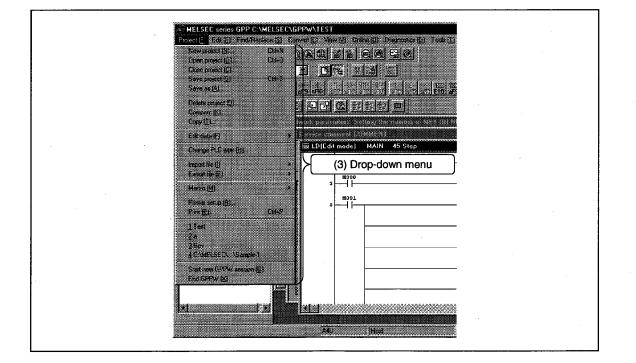


1) Select [Tools] - [Start ladder logic test] on GPPW. The logic test function (LLT) is closed.

4.3 GPPW Edit Window and Various Tools



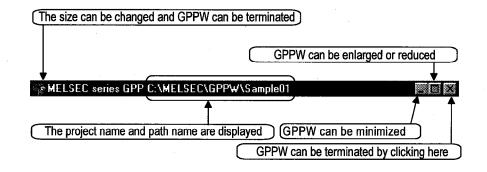
This section describes the GPPW window configuration and various tools.



4 - 7

1)Title bar

Indicates the name of the open project.



(2) Menu bar

Displays the names of GPPW menus.

If a desired menu is selected, the drop-down menu is displayed so that various functions can be used.

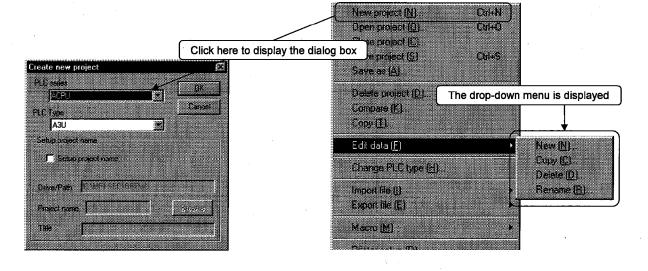
Ptoject (E) Edit (E) Find/Replace (S) Convert (C) View (V) Online (D) Diagnostics (D) Tools (T) Window (W) Help (H)

(3) Drop-down menu

Displays the names of GPPW functions.

When " >" is displayed at the rightmost end of the menu item, the drop-down menu of the selected item is displayed.

When " ... " is displayed next to a function name, a setup dialog box is displayed by selecting the item.



(4) Toolbar

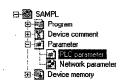
Displays the buttons for the frequently used functions assigned on the menu bar.

	s x Be	0 0 0 0		
Program			9 76 7 5	
4 F 4 P 4/F		1	-ft 41 _1ft+ sF7 _sF8 _aF7	

(5) Project data list

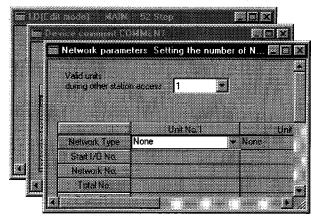
Lists project data by class.

The circuit creation dialog box and other dialog boxes can be directly called.



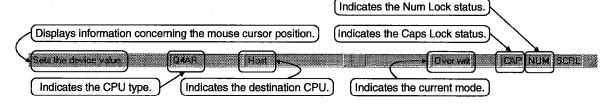
(6) Edit window

Displays the circuit creation dialog box and comment creation dialog box to make settings for circuits, comments, and parameters.

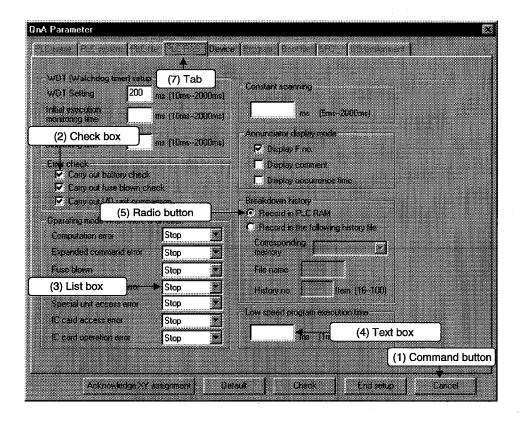


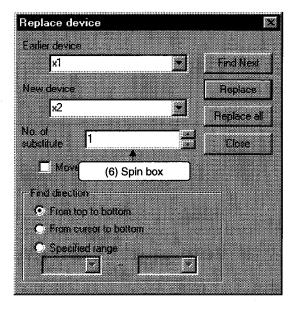
(7) Status bar

Displays the GPPW status information.



4.4 Dialog Box Basic Operations





4. USING GPPW

(1) Command button

Buttons such as [OK] and [Cancel]. Click the button to execute the item.

(2) Check box

Click a checkbox to select and execute an item.

(3) List box

Click T to drop-down the list of the items, then click a desired item to select.

(4) Text box

Enter characters with the keyboard. The text box may permit only numeric values or letters.

(5) Radio button

Click () for the item to be selected.

(6) Spin box

Spin boxes may permit direct value input or selection of a value by clicking $regimerrow \overline{regimerrow}$. When inputting a value directly, click and enter a numeric value with the keyboard.

When clicking \mathbf{k} for selecting a value, clicking \mathbf{k} increments the value and clicking \mathbf{v} decrements the value.

(7) Tab

For tab switching, click the desired tab in the property pages dialog box.

APPENDIX

A.1 Questions and Answers about Personal Computers

This section provides basic information in question & answer style for quick reference.

- Q1. What happens when the monitor with a resolution of 800x600 pixels or lower is used?
- A1. The icon near the edges of the screen may not be displayed entirely, so that the operations cannot be performed using that icon.
 Read the manual and set the dedicated resolution high enough to display the entire icon.
- Q2. What is the operating environment?
- A2. The operating environment refers to a combination of the hardware and operating system (Window 95 or Windows NT) that makes maximum use of the GPP function software package.

A list of operation-tested devices (personal computers and peripheral devices) is available at our local offices. Contact our local offices as necessary.

(Basically, the GPP function software package can be used so long as the operating environment specifications listed in the manual are satisfied.)

- Q3. Is the GPP software package available under Windows 3.1?
- A3. The GPP software package is not available under Windows 3.1.
- Q4. What happens when the CPU is Pentium 133MHz or slower?
- A4. When the clock speed of the CPU is slower than 133MHz, it takes longer for operations such as screen display.

A.2 Notes on GPPW

This section lists the questions and answers to assist you in solving the problems encountered during GPPW operation.

- Q1. Each circuit diagram is enclosed in white lines during circuit editing depending on the type of video card installed in the personal computer (card storing the characters, figures, and pictures to be displayed on the monitor as data). How can these white lines be deleted?
- A1. Make necessary settings from the Windows 95 " Control Panel ".

Operating procedure

(1) Open " Control Panel ".

- (2) Open " System ".
- \checkmark
- (3) Click the "Performance" tab.
 - \checkmark

L

- (4) Click the " Graphics " button. ↓
- (5) Set "Hardware acceleration " to the entry (second entry) next to " None ".
- Q2.
- What action should be taken for the message "Can not allocate Share memory" or "Initialization failed" displayed at the start of the GPP software package?
- A2. Restart the GPP function software package or restart Windows 95 and start the GPP function software package again.
- Q3. Why does it take time to change screen from 6) to 7) in page 3-3?

A3. It takes time when the memory-resident program (such as Virus checker) is running.

- Q4. Which method is recommended in upgrading the existing GPP function software package (overwriting the exiting software package or uninstalling the exiting package and installing the new software package)?
- A4. Uninstall the existing GPP function software package, then install the new package.

Q5. What points are to be noted in installing VirusBuster 97 (commercially available software package) on the personal computer.

A5.

A6.

(a) At the start of VirusBuster 97

storage into the task tray.

Because it takes time for initialization at the start of VirusBuster 97, other applications in "StartUp" group may not be started. In addition, it may take time to accept the subsequent operations after

These phenomena vary depending on the specifications of the operating environment (CPU, memory, etc.).

It is well known that this problem occurs frequently when the CPU is Pentium 100 MHz or lower.

(b) Effects on the system

When VirusBuster 97 is already started, system load increases because VirusBuster 97 checks the files.

For this reason, it may take extra time for starting the application depending on the operating environment.

These phenomena vary depending on the operating environment specifications (CPU, memory, etc.).

It is well known that this problem occurs frequently when the CPU is Pentium 100 MHz or lower.

(c) Effects on applications

When applications cannot be started or run normally after VirusBuster 97 has been installed, check the operations of the applications according to the following procedure:

1) Uninstall VirusBuster 97 and restart the system to check the operations of the applications.

If the same problem recurs, the cause of the problem is not VirusBuster 97.

In such a case, contact our application support engineers.

2) When the applications run normally after VirusBuster 97 has been uninstalled, install VirusBuster 97 again and change the monitor setting to "Custom Monitor." In addition, change the selection of the checkboxes for Extension Designation or Monitor Function.

* When the system does not work well after the step 1) has been performed, install Windows 95 and/or applications again.

- Q6. Can the application (SW0D5C-G, SW0D5C-LLT, etc.) run on the Windows NT 4.0 Workstation?
 - SW05C-GPPW and SW0D5C-LLT operations are not guaranteed. Be sure to use SW1D5C-GPPW, SW1D5C-LLT and the subsequent version.

A7.

Q7. When a program is read from a floppy disk, it cannot be read from the floppy disk so long as the disk is write protected. Why not?

Because multiple GPPWs can be started, access to files in the same floppy disk may occur simultaneously. In such a case, an access flag is written to a floppy disk at the time of floppy disk access to prevent the files in the disk from being accessed from another GPPW. Namely, no files can be read in this system so long as the floppy disk is write protected.

GPP Function software for Windows SW2D5C-GPPW-E SW2D5C-LLT-E SW2D5F-GPPW-E SW2D5F-LLT-E Operating Manual (Startup)

MODEL SW2D5-GPPW-STA-E MODEL 13J938 IB(NA)-66878-B(9810)MEE

MITSUBISHI ELECTRIC CORPORATION

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