MITSUBISHI

GPP Function software for Windows

SW2D5C-GPPW-E SW2D5C-LLT-E
SW2D5F-GPPW-E SW2D5F-LLT-E

Starting GPPW

MELSEC

Mitsubishi Programmable Controller

SAFETY PRECAUTIONS

(Read these precautions before using.)

◆ When using Mitsubishi equipment thoroughly read this manual and the associated manuals referenced within.

◆ Also pay careful attention to safety and handle the module properly. These precautions apply only to Mitsubishi equipment. Refer to the CPU module user's manual for a description of the PLC system safety precautions.

These SAFETY PRECAUTIONS classify the safety precautions into two categories: "DANGER" and "CAUTION".

⚠ DANGER	Procedures which may lead to a dangerous condition and cause death or serious injury if not carried out properly.
⚠ CAUTION	Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.

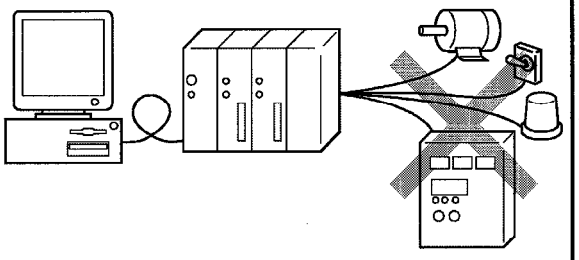
Depending on circumstances, procedures indicated by ⚠ CAUTION may also be linked to serious results.
In any case, it is important to follow the directions for usage.

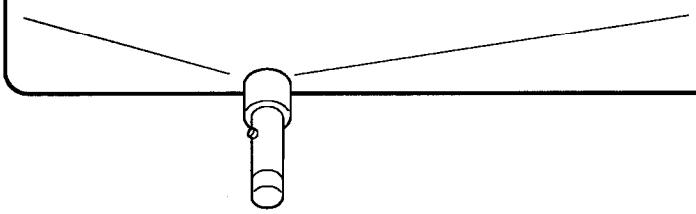
Store this manual in a safe place so that you can take it out and read it whenever necessary. Always make it available to the end user.

USE PRECAUTIONS

⚠ DANGER

- This manual is an introduction the GPPW module and is intended to facilitate its use.
  Be familiar with GPPW functions before connecting the system control units (CPU, I/O unit, special unit to external equipment) for learning.
  Operation mistakes could cause errors or damage to the module.



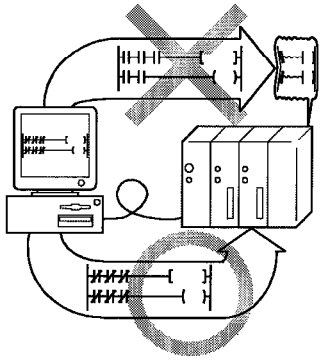


Be sure to observe the following when using the control unit for the system.

DESIGN PRECAUTIONS

⚠ DANGER

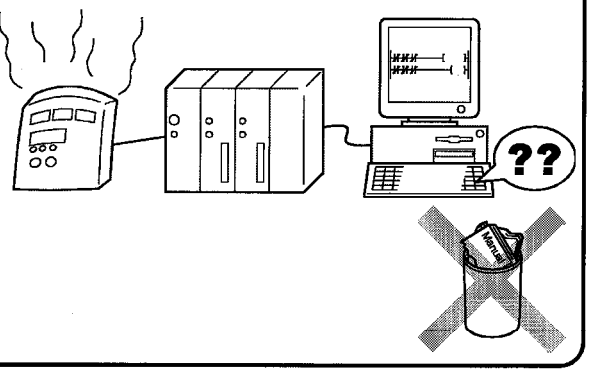
- Install an interlock circuit external to the PLC that keeps the entire system safe even during data change, program change or status control from GPPW to the PLC in operation.
  Determine the action between GPPW and the PLC CPU for a communication problem.

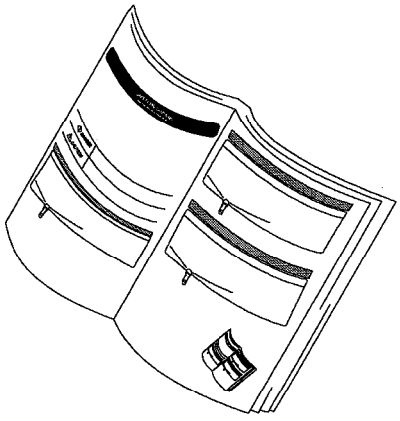


STARTUP AND MAINTENANCE PRECAUTIONS

⚠ CAUTION

- The online operations conducted for the CPU module being operated, connecting the peripheral device (especially, when changing data or operation status), shall be conducted after the manual has been carefully read and a sufficient check of safety has been conducted. Operation mistakes could cause errors or damage to the module.





Revisions

*The manual number is noted at the lower left of the back cover.

Print Date	*Manual Number	Revision
Aug. 1998	SH(NA)-4006-A	First edition
Nov.1998	SH(NA)-4006-B	Overall revision

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Introduction

Thank you very much for purchasing Mitsubishi General Purpose PLC MELSEC Series.
This manual "Starting GPPW" is intended for first-time users of the Windows version GPP Software Package GPPW.
This manual uses screen display examples and figures to help you understand procedures for installation on the personal computer, start-up operations, basic principles of GPPW, circuit creation and editing.
With this manual, anyone can easily master the operation of the GPPW.
To help you master operations with the GPPW, this manual demonstrates the most frequently used GPPW functions.

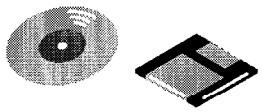
- Microsoft Windows, Microsoft Windows NT, Microsoft Word and Microsoft Excel are trade marks of Microsoft Corporation in the U.S.A. and other countries.
  Company names and product names in the text are trademarks or registered trademarks of companies.

Parts of this Manual

This manual consists of the following five parts.

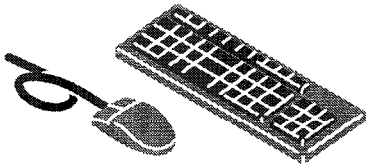
Part 1 Getting started

Explains GPPW features, installation procedures, GPPW system configuration and operation flow.



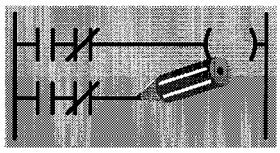
Part 2 Basics

Explains mouse basic operations, GPPW screen configuration and GPPW basic principles.



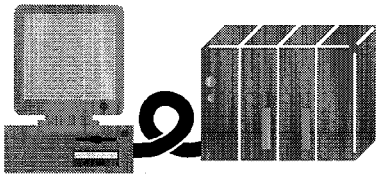
Part 3 Offline operations

Explains operations required for circuit creation, the method and editing of circuit creation and comment writing, and printing.



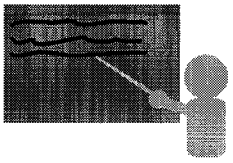
Part 4 Online operations

Explains basic operations for online operation.



Part 5 Useful functions

Explains useful functions for GPPW operations.

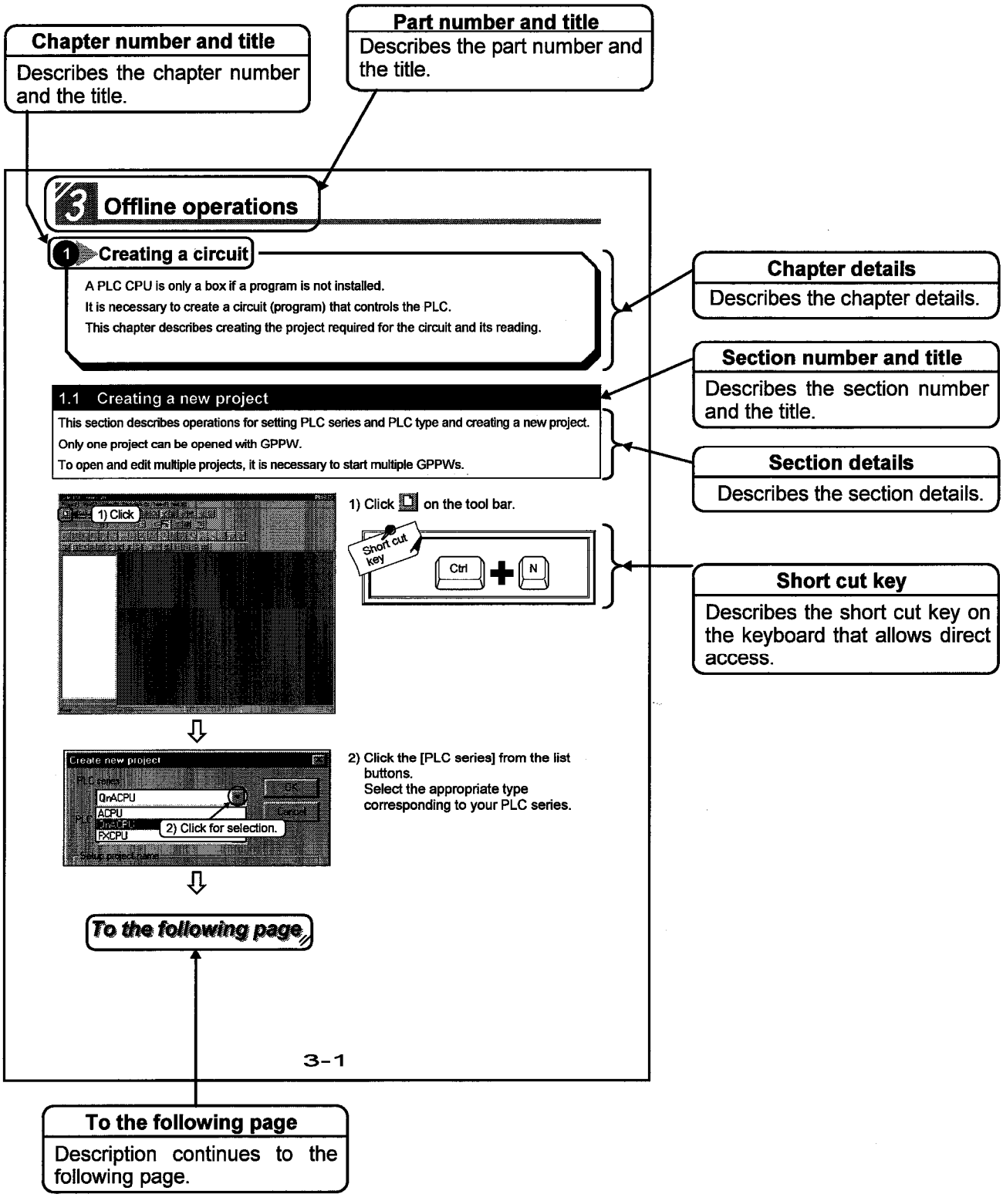


How to use this manual

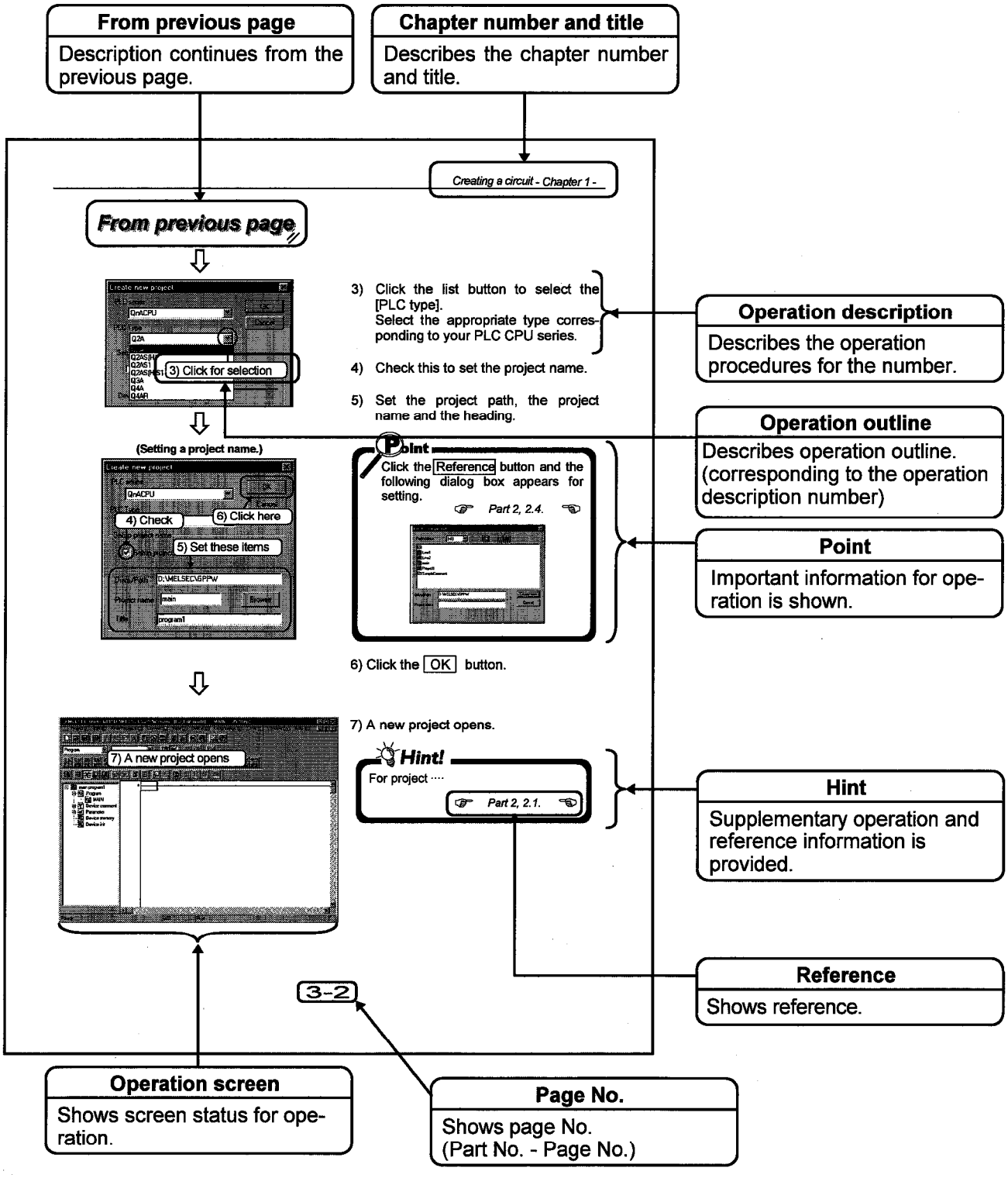
Sections in this manual are assigned to even page numbers. The section titles show actual operations.

Operations in this manual are described as QnACPU for PLC series.

Function keys are described as GPPQ type. (Refer to Part 5, 1.2.)



- Operation outline number corresponds to the operation description number.
- The left half of the page shows screens for operation procedures. The right half of the page shows operation procedures for the screens.
- Keys in this manual show general key descriptions available for any type of keyboard.



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Abbreviation

- **GPPA**
  Abbreviation of Type SW□IVD-GPPA GPP software package.

- **GPPQ**
  Abbreviation of Type SW□IVD-GPPQ GPP software package.

- **MEDOC**
  Abbreviation of Type SW□IM-MEDOC software package.
  * MEDOC is a programming software package used out of Japan.

- **GPPW**
  Abbreviation of Type SW2D5C/F-GPPW software package.

- **Windows**
  Abbreviation of Microsoft Windows 95 and Microsoft Windows NT 4.0.

- **Logic Test function (LLT)**
  Abbreviation of Type SW2D5C/F-LLT ladder logic test tool software package.

Part 1 *Getting started*

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MEMO

Part 1

Getting Started

1. Getting Started

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1 Getting started

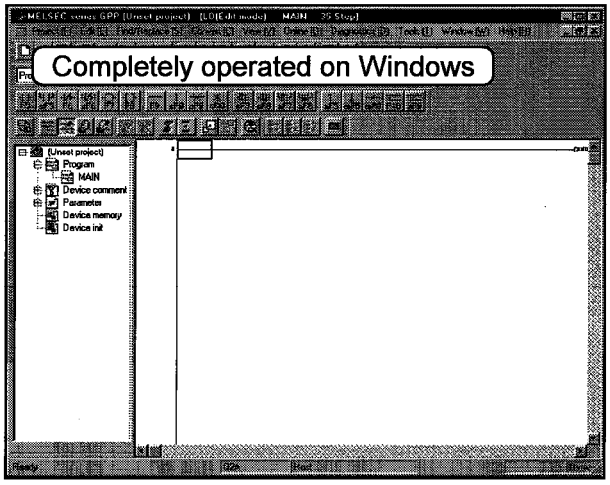
GPPW is a programming software package that operates on Windows.
Since it is used on Windows machines, operation performance is much better than the conventional GPPA and GPPQ.
This chapter explains information you need for GPPW operation.

1.1 What GPPW can do

This section explains functions and features of GPPW.

——Easy operation on Windows——

The program is easy to understand and can be operated on Windows.



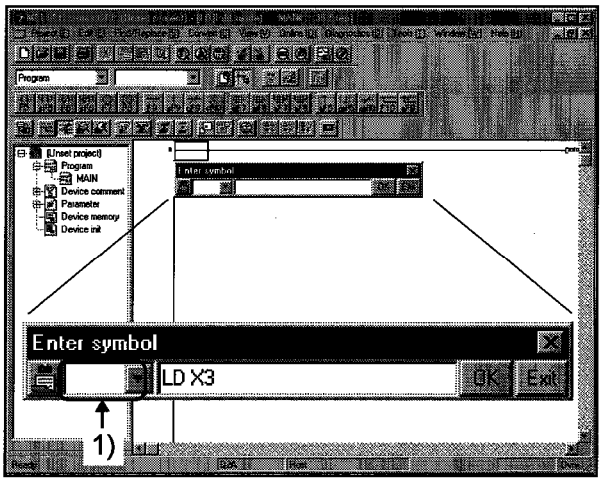
Circuits can be easily and quickly created with the tool bar, the menu bar, the program list window.

Hint!

Since the program is operated on Windows, you can easily cut, copy and paste between projects.

——List expressions (mnemonic language) can be input on the circuit creation screen——

Input of list expressions (mnemonic language) on the circuit creation screen allows creation of circuits. Circuits can also be created with tool buttons, menus, or function keys.



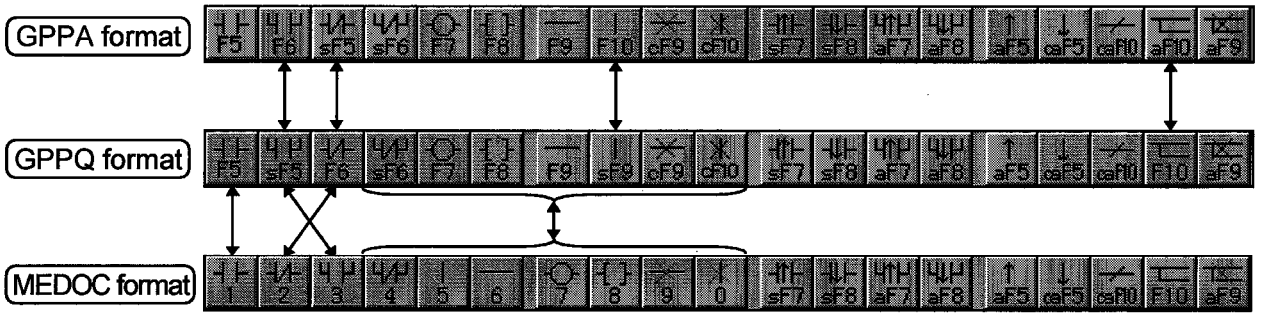
Point

If 1) is not blank, an error occurs at the time of list expression input.

——Compatible function keys with GPPA, GPPQ and MEDOC——

The GPPW functions keys are compatible with those of GPPA, GPPQ and MEDOC. This facilitates smooth conversion from conventional package to GPPW.

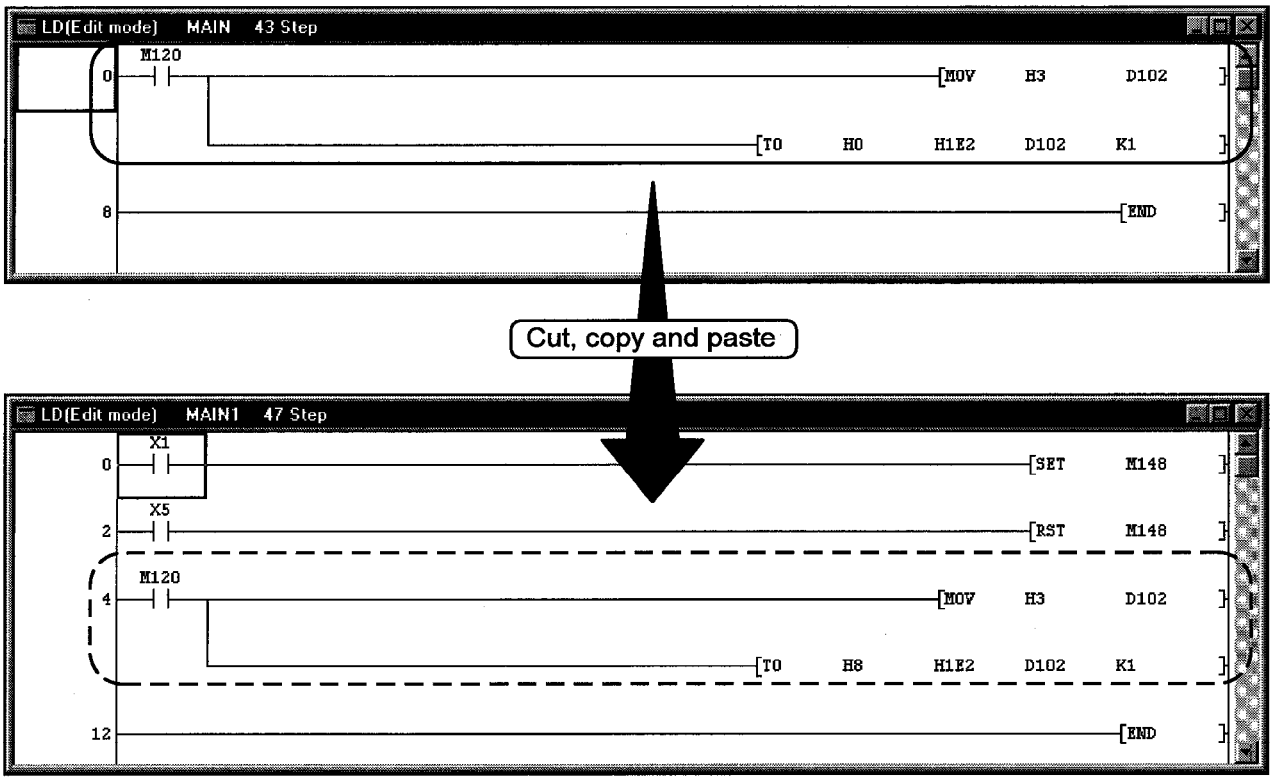
☞ *Part 5, 1.2.* ☜



——A circuit can be used between multiple projects.——

With cut, copy and paste functions, a circuit can be used between multiple projects.

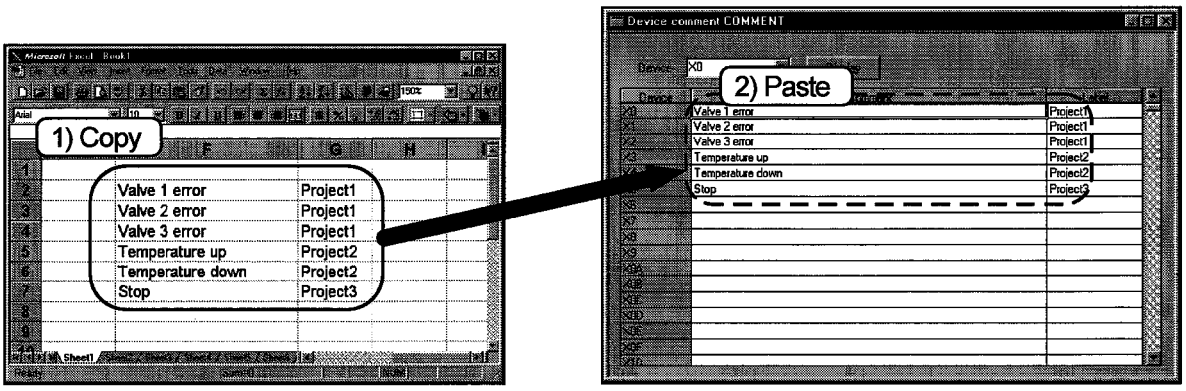
☞ *Part 5, 2.3.* ☜



——A comment developed in a spreadsheet software such as Excel can be used.——

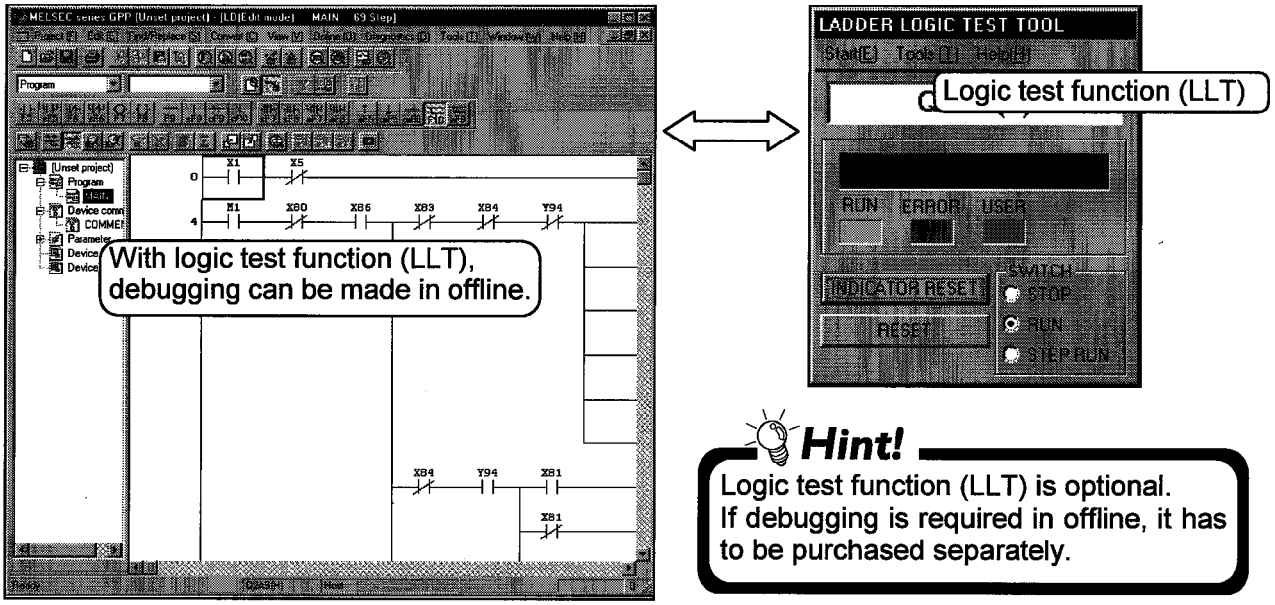
With cut, copy and paste functions, a comment developed in a spreadsheet software such as Excel can be used.

☞ *Part 5, 2.1.* ☜



——Debugging can be made in offline.——

Logic test function (LLT) can operate in place of PLC. Without debugging equipment such as the PLC CPU, monitoring and debugging can be made on GPPW.

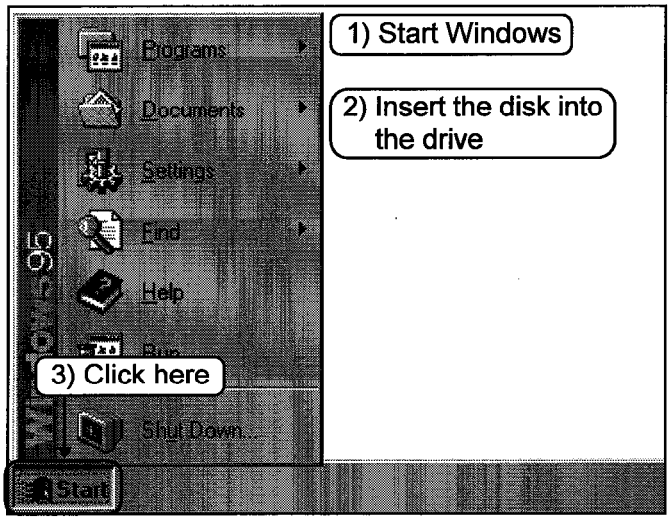


Hint!

Logic test function (LLT) is optional.
If debugging is required in offline, it has to be purchased separately.

1.2 Easy installation of GPPW

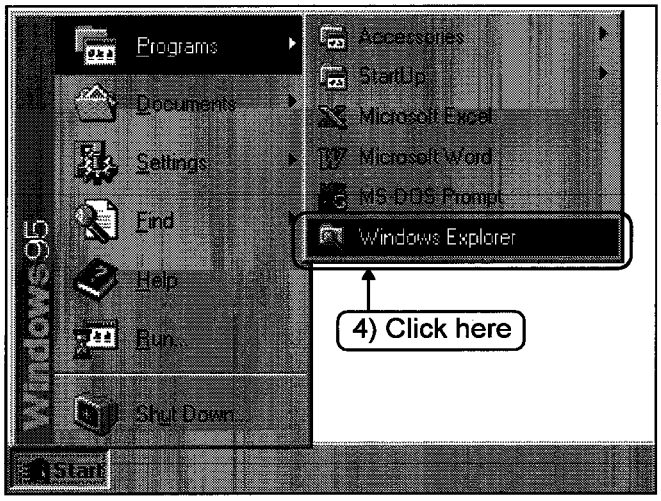
This section explains how to install GPPW.



1) After turning on the power of the personal computer, make sure that Windows has started.

2) Insert the disk into the drive.
   - For SW2D5F-GPPW
     Insert the first FD into the FD drive.
   - For SW2D5F-GPPW
     Insert the first FD into the FD drive.

3) Click the Start button.



4) Click [Programs] - [Windows Explorer] menu.

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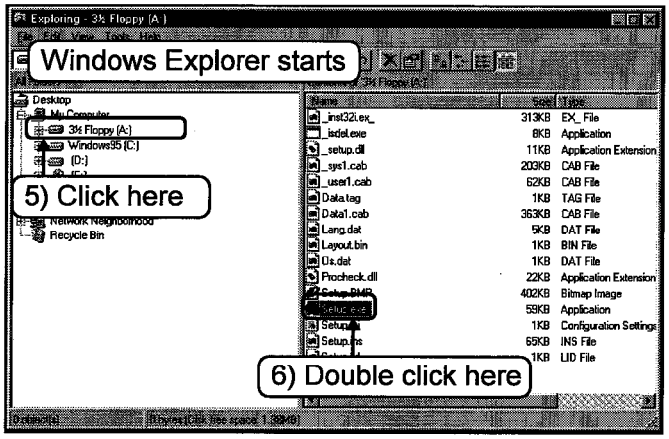
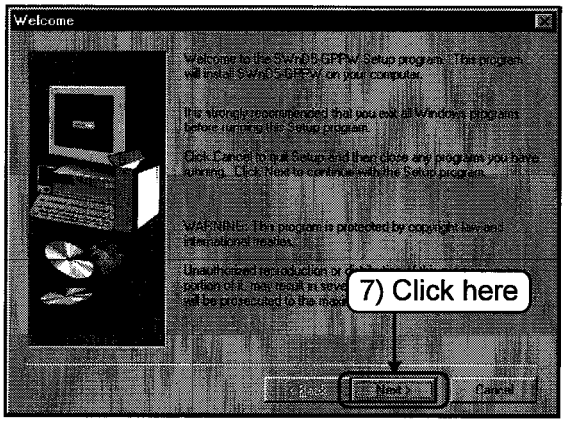


5) Click the drive with GPPW.
   - For SW2D5F-GPPW
     Click the FD drive.
   - For SW2F5C-GPPW
     Click the CD-ROM drive.

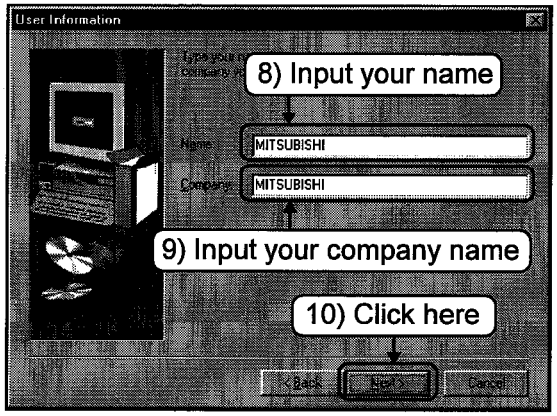
6) Double click the "SETUP.EXE".

Point

End all other applications on the Windows before installation.



7) Read the explanation and click the Next button.



8) Input your name.

9) Input your company name.

10) Make sure that your name and company name are correctly input. Click the Next button.

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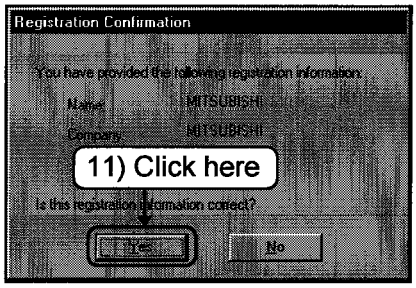
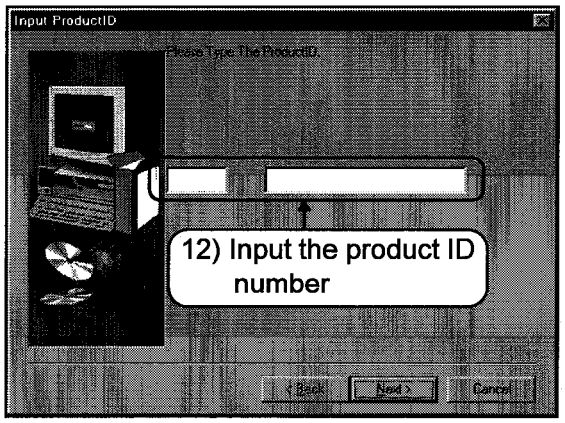


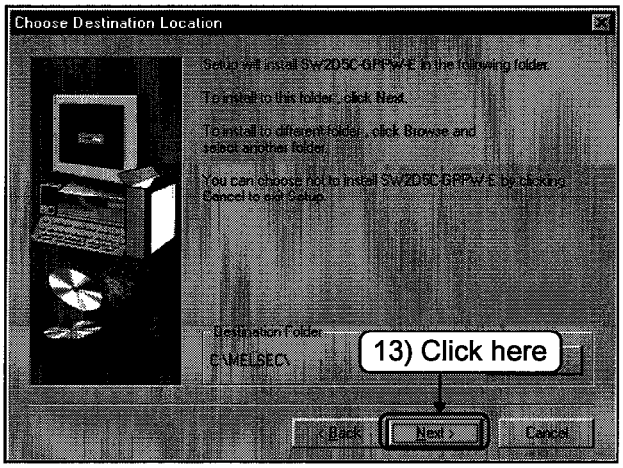
11) Check the registration details. Click the Yes button.



12) Input the product ID number and click the Next button.

Point

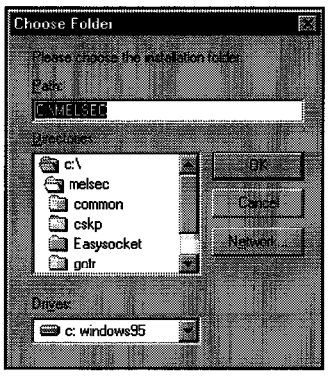
The product ID number is shown on the "Software Registration" accompanying the product.



13) Click the Next button and the following dialog box appears to set the installation destination.

Point

Click the Browse button and the following dialog box appears to set the installation destination.



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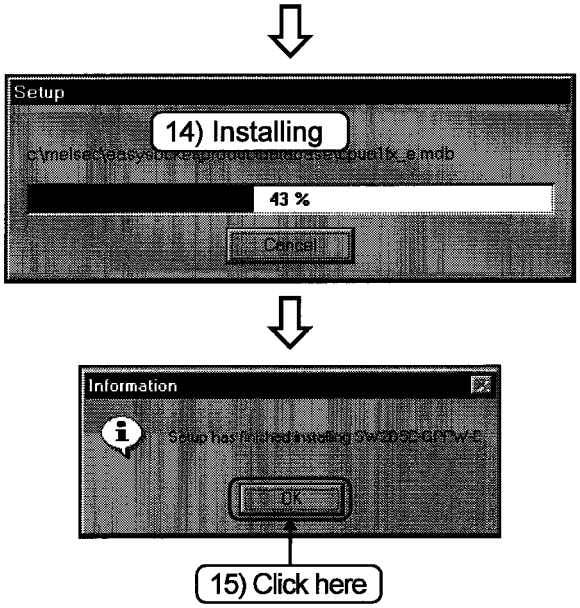


14) Installation starts. Operate according to the instructions on the screen.

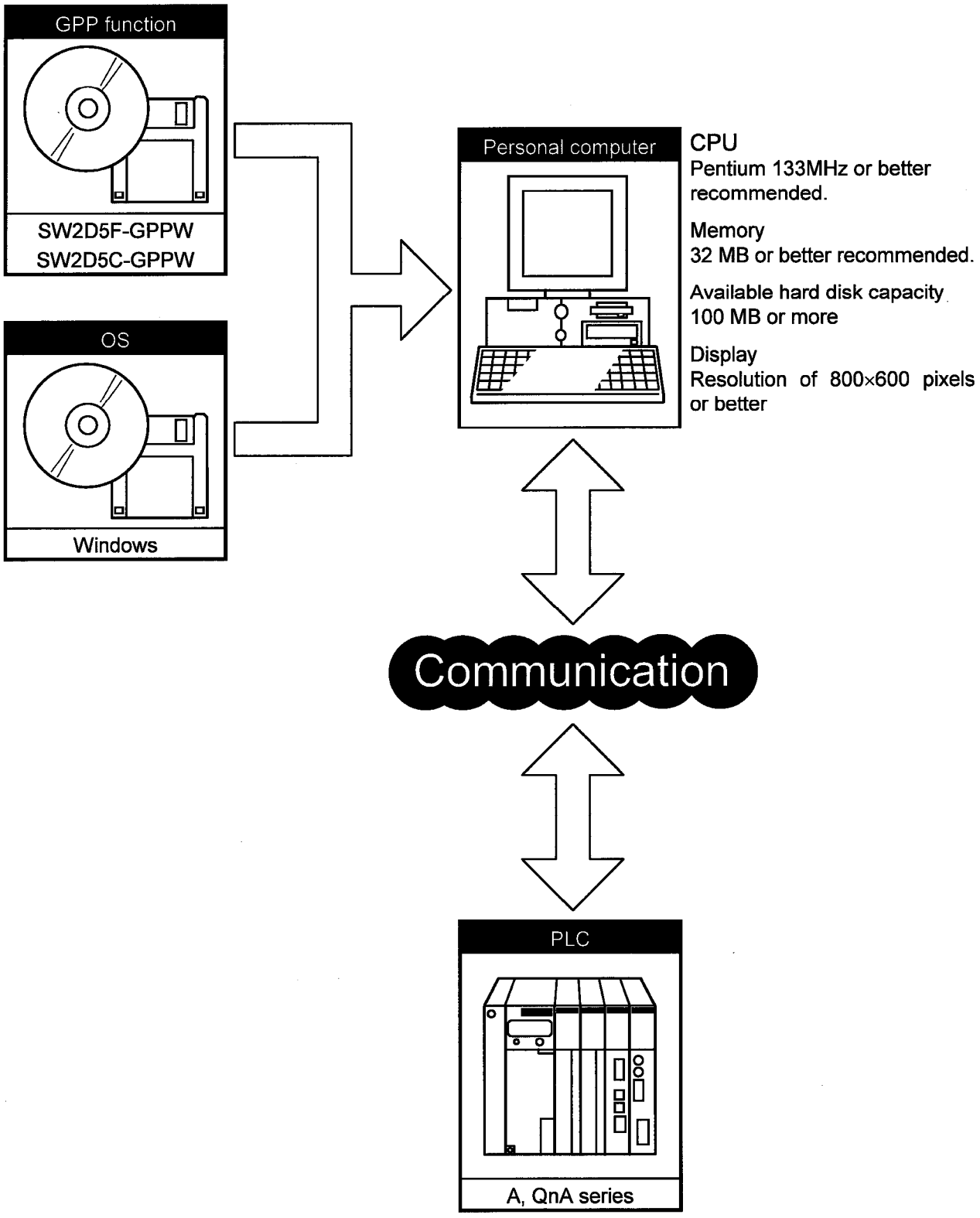
15) Installation has completed.
Click the OK button.

Point

If installation fails midway, delete GPPW and install it again.

1.3 Required items to gain access to PLC

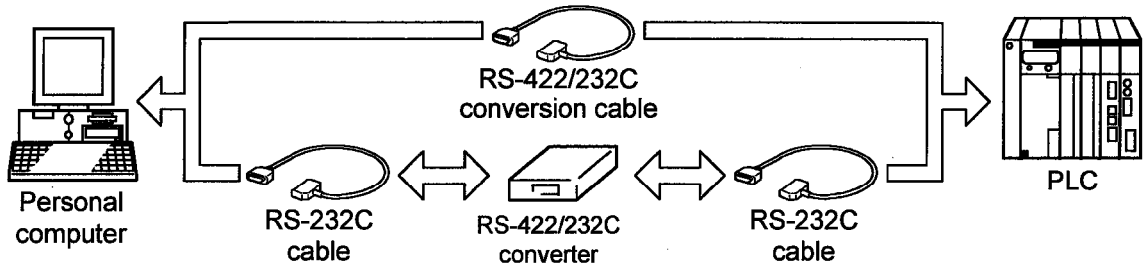
This section explains the required devices and software to gain access to PLC.



——Types of communication routes——

(1) Direct link to PLC CPU

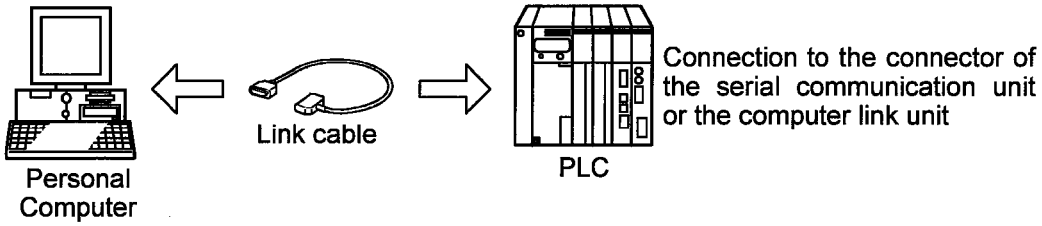
Communication is performed with the direct link between the COM port of the personal computer and the RS-422 connector of the PLC CPU.



(2) Through serial communication unit (QnA only)

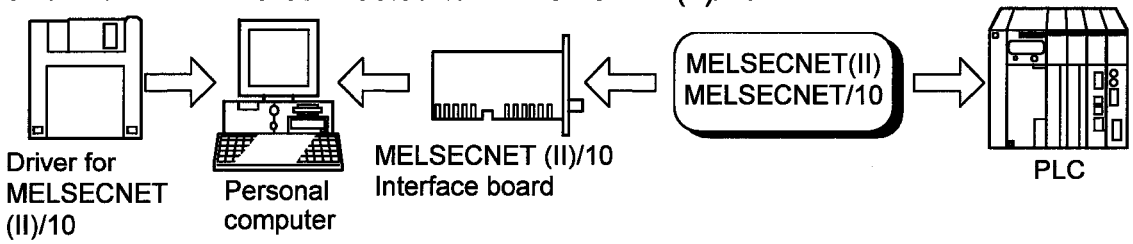
Through computer link unit (ACPU only)

Communication is performed with the link between the COM port of the personal computer and the connector of the serial communication unit or the computer link unit.



(3) Through MELSECNET(II)/10

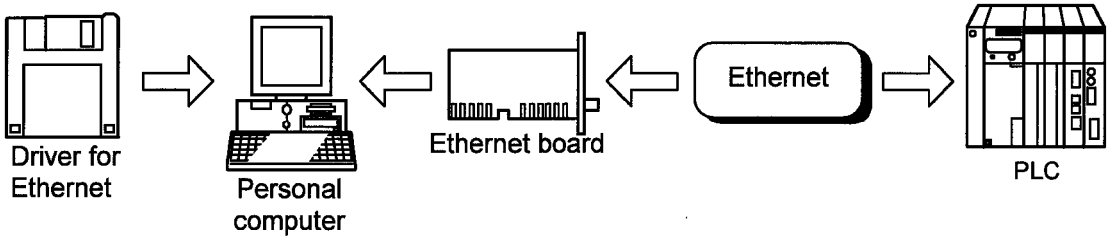
MELSECNET(II)/10 is installed on the personal computer. Communication is performed with PLC connected to MELSECNET(II)/10.



(Available for local station only)

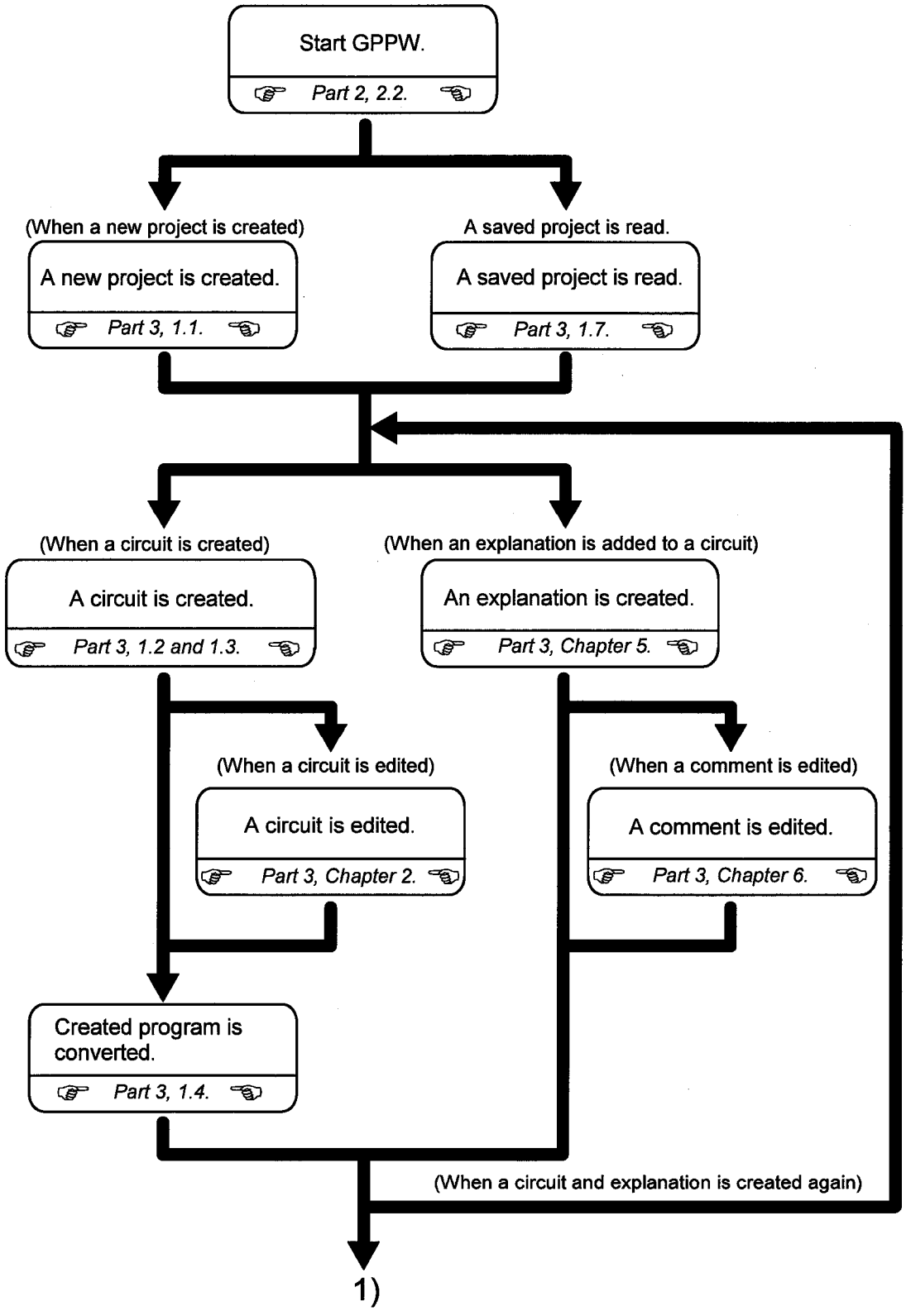
(4) Through Ethernet

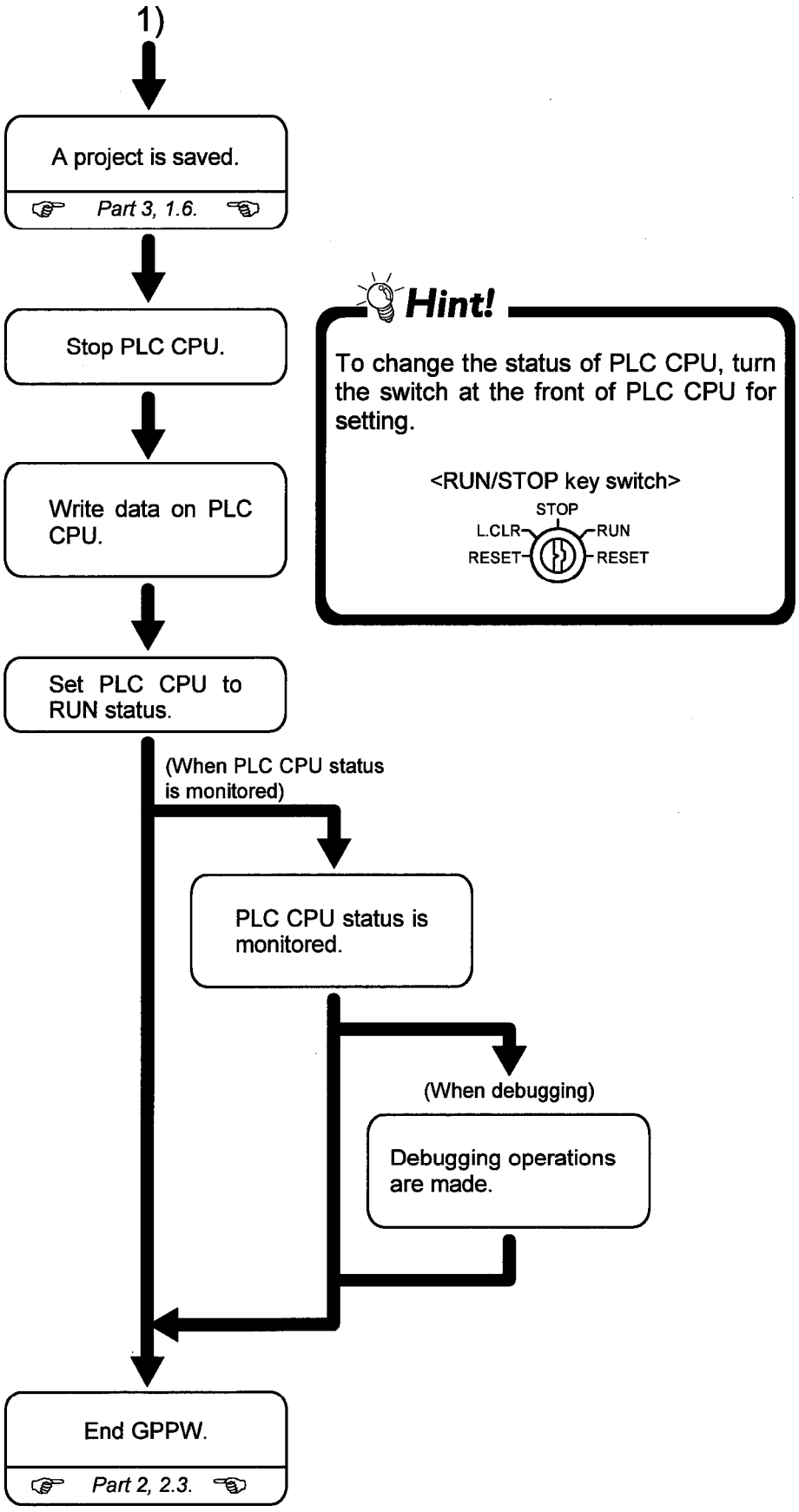
Commercially available Ethernet board is installed on the personal computer. Communication is performed with PLC connected to Ethernet.



1.4 Operation flow

This section explains operations from start-up to end of GPPW.




1)
A project is saved.
Part 3, 1.6.
Stop PLC CPU.
Write data on PLC CPU.
Set PLC CPU to RUN status.
(When PLC CPU status is monitored)
PLC CPU status is monitored.
(When debugging)
Debugging operations are made.
End GPPW.
Part 2, 2.3.
Hint!
To change the status of PLC CPU, turn the switch at the front of PLC CPU for setting.
<RUN/STOP key switch>
STOP
L.CLR
RUN
RESET
RESET

MEMO