

MITSUBISHI



Type SW1D5F-CSKP-E Basic Communication Support Tool

Startup Manual



Mitsubishi Programmable Controller

About Manuals

The following lists the manuals for the SW1D5F-CSKP-E Communication Support Tool.

Related Manuals

Manual Name	Manual No. (Model Code)
Type SW1D5F-CSKP-E Communication Support Tool Operating Manual This manual describes how to set up and operate each communication utility. (This manual comes with the software Tool.)	IB-66871 (13J934)
Type SW1D5F-CSKP-E Communication Support Tool Programming Manual This manual describes each function of the MELSEC Data Link Library attached to the CSKP-E. (This manual comes with the software Tool.)	IB-66872 (13JF55)
Error List Manual for General-Use Personal Computer Software Package This manual describes the details and the action to be taken for each error code issued when a utility or a function is in use. (This manual comes with the software Tool.)	IB-66873 (13JF88)

REVISIONS

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

Print Date	* Manual Number	Revision
Sep.1998	IB(NA)-66887-A	First edition

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INTRODUCTION

Thank you for purchasing the type SW1D5F-CSKP-E Communication Support Tool.

This Startup Manual describes the package features, system configuration, and installation-related items. Read this manual and understand the package functions thoroughly in advance for correct use.

Make sure to provide the end user with this manual for quick reference.

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CONTENTS

1. GENERAL DESCRIPTION	1- 1 to 1- 7
1.1 Features	1- 1
1.2 Abbreviations and Terms in This Manual	1- 6
1.3 Product Components	1- 7
2. SYSTEM CONFIGURATION	2- 1 to 2- 7
2.1 System configuration	2- 1
(1) Computer link communication (serial communication)	2- 1
(2) Ethernet communication	2- 2
(3) RS-422 communication	2- 3
(4) MELSECNET/10 communication (available under Windows 95 or Windows NT 4.0)	2- 4
(5) EMED commnuication (available under Windows NT 4.0)	2- 5
2.2 Operating Environment	2- 6
2.3 Available PC CPUs	2- 6
2.4 Available Modules	2- 7
2.5 Available Interface Cards	2- 7
3. INSTALL AND UNINSTALL	3- 1 to 3- 8
3.1 Install	3- 1
3.2 Directory Structure	3- 5
3.3 Registered Icons	3- 6
3.4 Uninstall	3- 7
APPENDICES	APP- 1
Appendix 1 Restrictions	APP- 1

1. GENERAL DESCRIPTION

Type SW1D5F-CSKP-E Communication Support Tool is a software package that enables communication between a personal computer and a PC by five different protocols through the use of common functions.

The use of common functions has greatly done away with the complexities associated with the development of programs that involve serial communication or communication via the Ethernet.

In addition, the Communication Support Tool sets up inside the personal computer the bit and word devices equivalent to those in the PC.

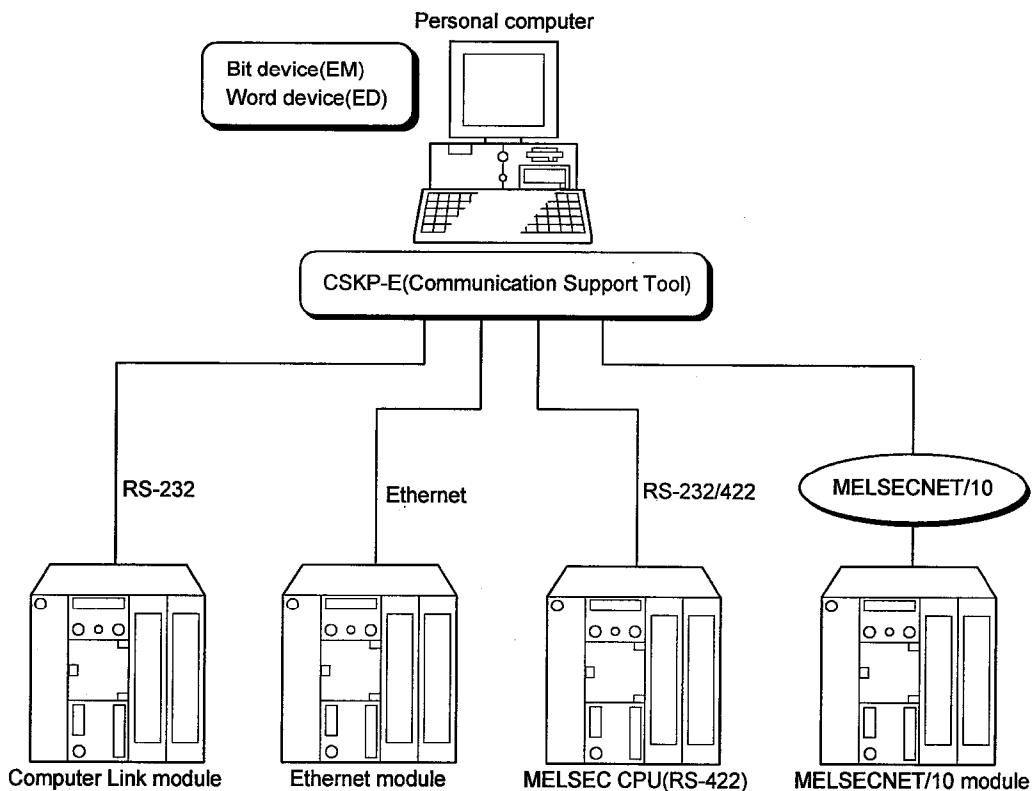
This enables the personal computer to handle the device data as they are.

1.1 Features

The SW1D5F-CSKP-E Communication Support Tool has the following features.

1. No communication path need be considered for communication.

CSKP-E controls all communication units, freeing the user from complexities associated with communication programs.

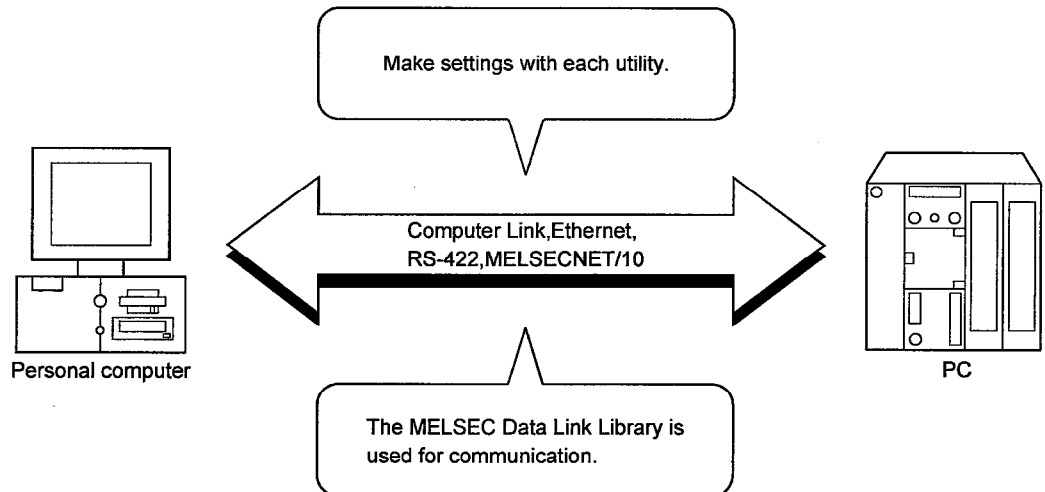


2. Full range of utilities

The following utilities (provided for each protocol) permit you to easily make settings for communication.

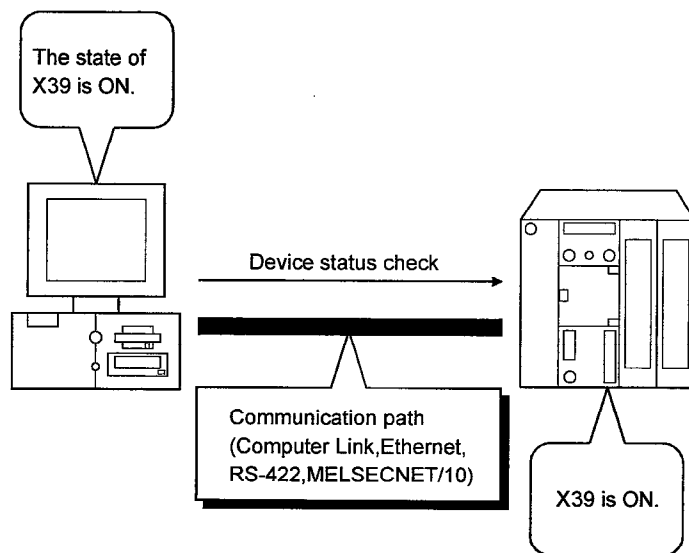
- MELSECNET/10 Utility (Available Only under Windows 95 or Windows NT 4.0)
Use this utility to make settings when accessing a networked PC from the MELSECNET/10 port of the personal computer.
- Computer Link Utility
Use this utility to make settings when accessing a PC connected by the computer link unit via the COM port connected to the computer link (serial communication) module of the personal computer.
- Ethernet Utility
Use this utility to make settings when accessing a PC connected by the Ethernet interface module from the personal computer.
- RS422 Utility
Use this utility to make settings when accessing a PC directly connected via the RS-422 interface from the personal computer.

POINT
The MELSECNET/10 utility can be used only under Windows 95 or Windows NT 4.0. This utility cannot be used under Windows 98.



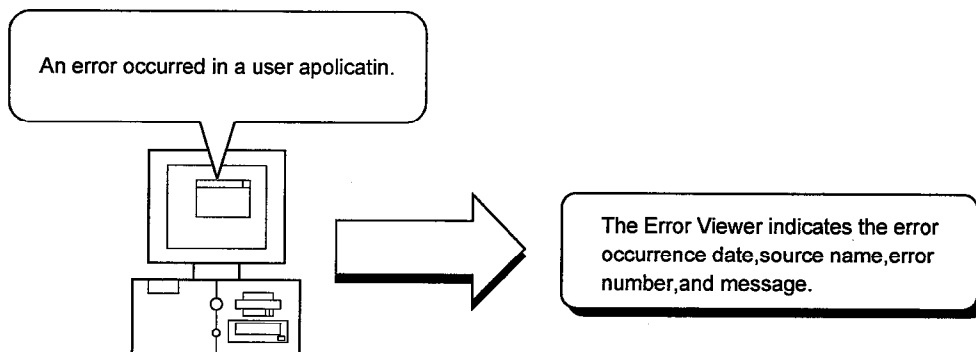
3. Device Monitor function

The Device Monitor Utility allows you to monitor the state of the designated device or to change the data.



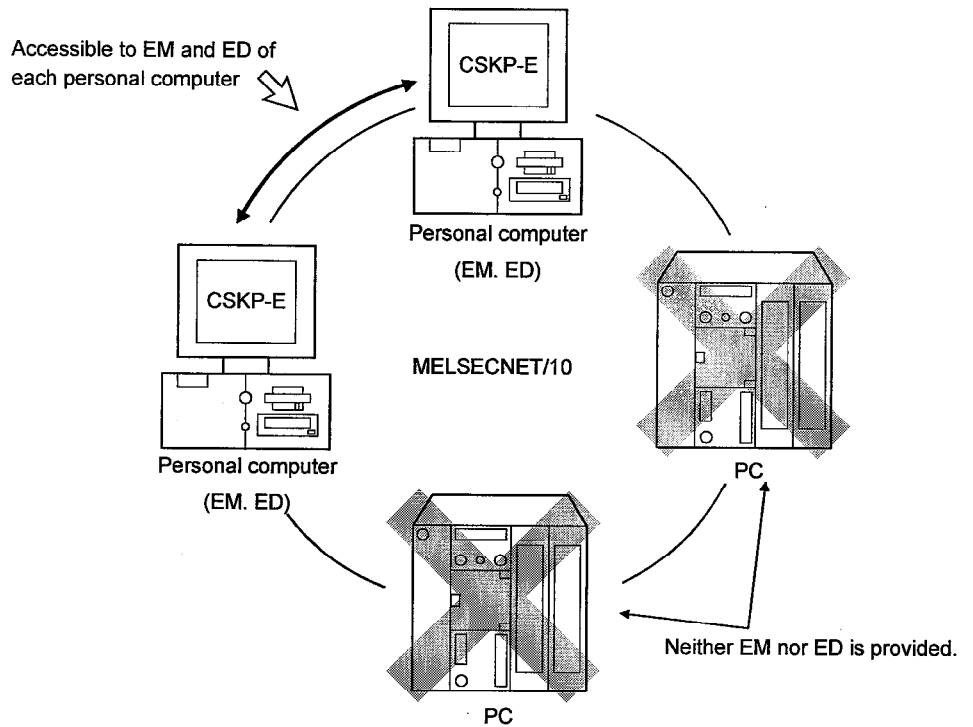
4. Error Viewer function

The Error Viewer allows you to check an error at a glance. Because the error is recorded, you can check the time when it occurred.



5. Shared devices available (EM,ED)(Available only under Windows NT 4.0)

The shared device (EM: bit device, ED: word device) can be accessed from processes of the same personal computer or those on the personal computer of MELSECNET/10. The CSKP-E allows access from multiple programs. This feature enables the development of a high value-added system. For example, data collected from the PC can be manipulated or processed using another program, the result of which can be displayed on the monitor.



	EM (Bit device)	ED (Word device)
Block range	0 to 255(No.0 is used for the system area)	
Device range	0 to 8191 for each block (8192 points)	

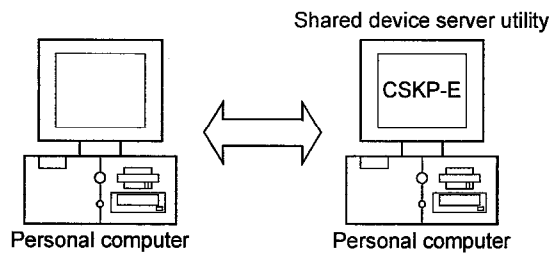
POINT
 The shared device is available only when the operating system is Windows NT 4.0. It can not be used under Windows 95 and Windows 98.

6. Device refresh (available only under Windows NT 4.0)

The Shared Device Server Utility can be used to pass the value(s) between personal computers or between the personal computer and the PC without the aid of programs.

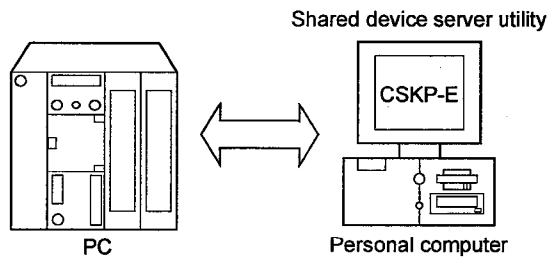
1) Personal computer to personal computer

The device value can be passed between personal computers on the MELSECNET/10.



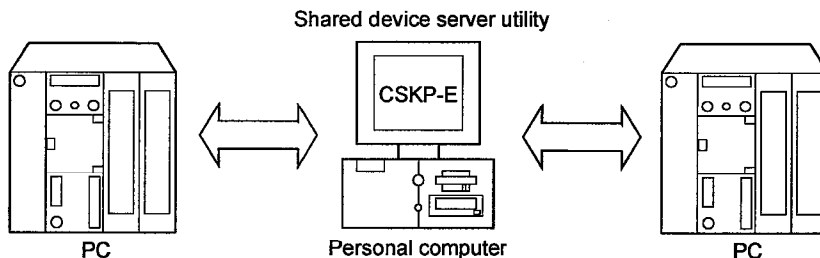
2) PC to personal computer

The device value of the designated PC can be passed.



3) PC to PC

The device value can be passed between the PCs via the personal computer in which CSKP-E has been installed.



POINTS

- The Shared Device Server Utility can be used when the operating system is Windows NT 4.0. It cannot be used under Windows 95 and Windows 98.
- Device refresh can be performed within the range supported by this software package. For details, refer to the Type SW1D5F-CSKP-E Communication Support Tool Operating Manual.

1.2 Abbreviations and Terms in This Manual

Unless otherwise stated, this manual uses the following abbreviations and terms to discuss the CSKP-E.

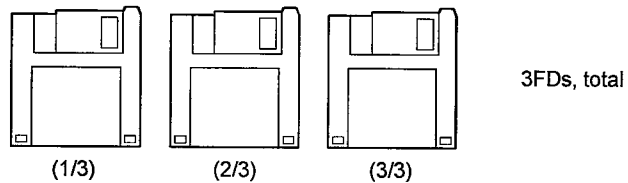
Abbreviation/Term	Explanation
CSKP-E	Abbreviation for SW1D5F-CSKP-E Communication Support Tool.
GPPW-E	Generic term for SW□D5C-GPPW-E and SW□D5F-GPPW-E GPP Function Software Packages.
Windows NT 4.0	Abbreviation for Microsoft Windows NT Workstation 4.0.
Windows 95	Abbreviation for Microsoft Windows 95.
Windows 98	Abbreviation for Microsoft Windows 98.
Windows	Generic name for Microsoft Windows 95, Windows 98, and Windows NT Workstation 4.0.
VB	Abbreviation for Microsoft Visual Basic 4.0 or Visual Basic 5.0.
VC++	Abbreviation for Microsoft Visual C++ 4.2 or Visual C++ 5.0.
Personal computer	Abbreviation for IBM PC/AT compatible DOS/V personal computer.
PC	Generic term for A/QnA type large-scale and small-scale PCs.
A70BDE-J71LP23GE	Abbreviation for A70BDE-J712P23GE type MELSECNET/10 interface card.
MELSECNET/10 I/F card	Generic term for A70BDE-J71LP23GE.
MNET10P	Abbreviation for SW1VDWT-MNET10P type MELSECNET/10 software package.

1.3 Product Components

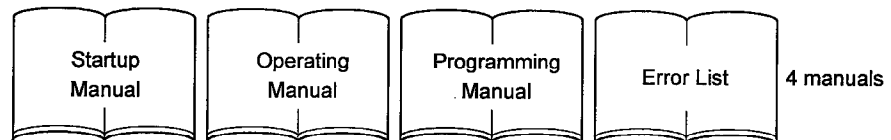
(1) Product Components

The following components are included in the package.

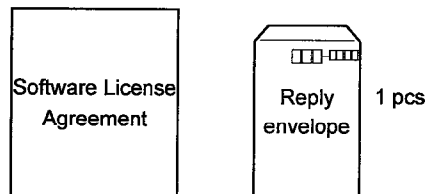
(a) SW1D5F-CSKP-E Communication Support Tool



(b) Manual



(c) Others



(2) Number of licenses

The number of licenses are described below.

(a) SW1D5F-CSKP-E

Two licenses (one for execution and one for development)

(b) SW1D5F-CSKP-E-5

Six licenses (five for execution and one for development)

(c) SW1D5F-CSKP-E-10

Eleven licenses (ten for execution and one for development)

(d) SW1D5F-CSKP-E-20

Twenty-one licenses (twenty for execution and one for development)

2. SYSTEM CONFIGURATION

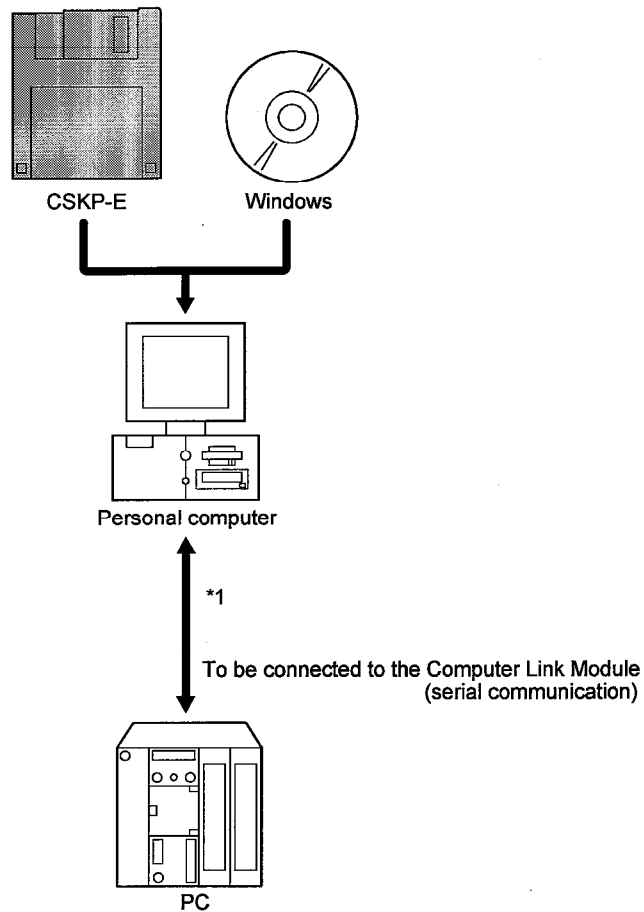
System configuration, operating environment, available CPU, unit and interface card are explained.

POINT
Purchase the software and hardware components except the CSKP-E software as necessary.

2.1 System Configuration

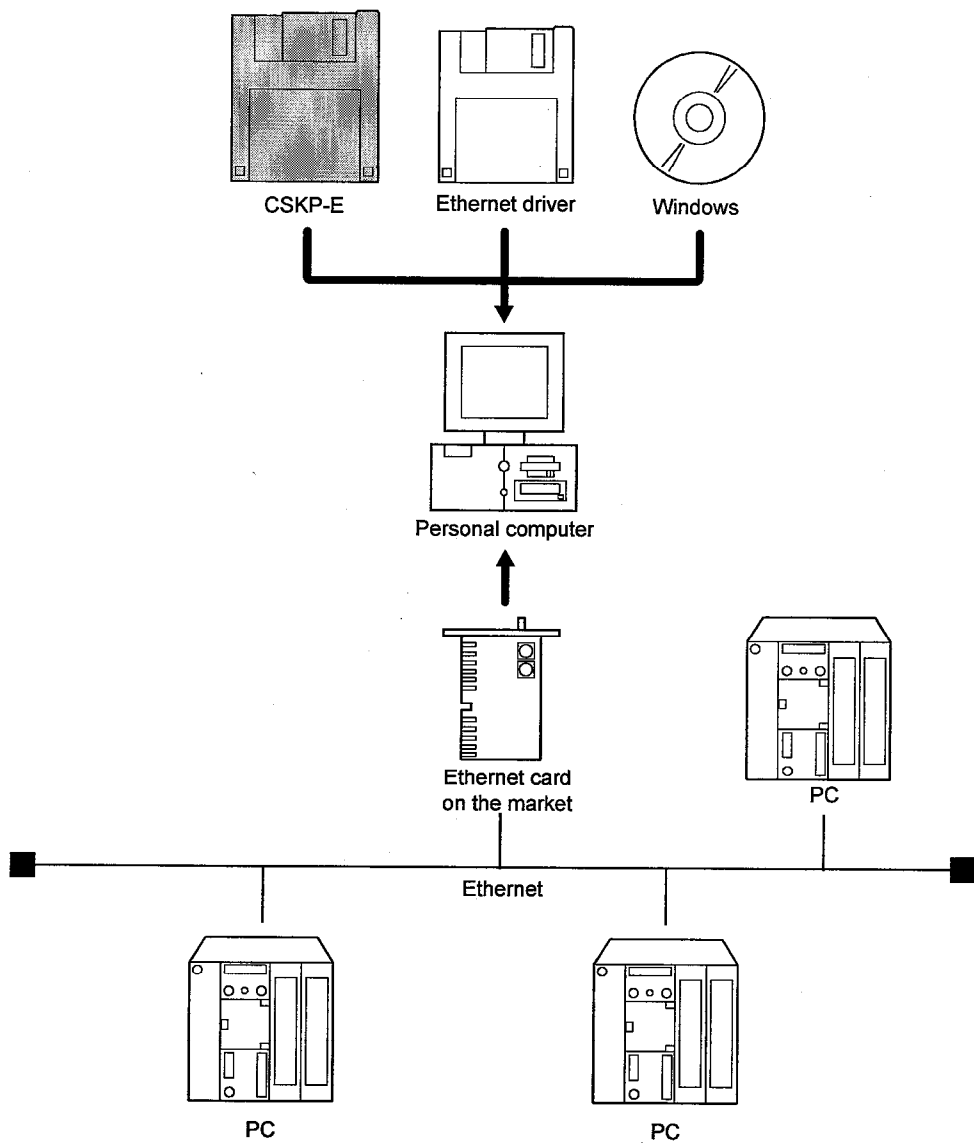
The following figure shows the system configuration for CSKP-E.

(1) Computer link communication (serial communication)



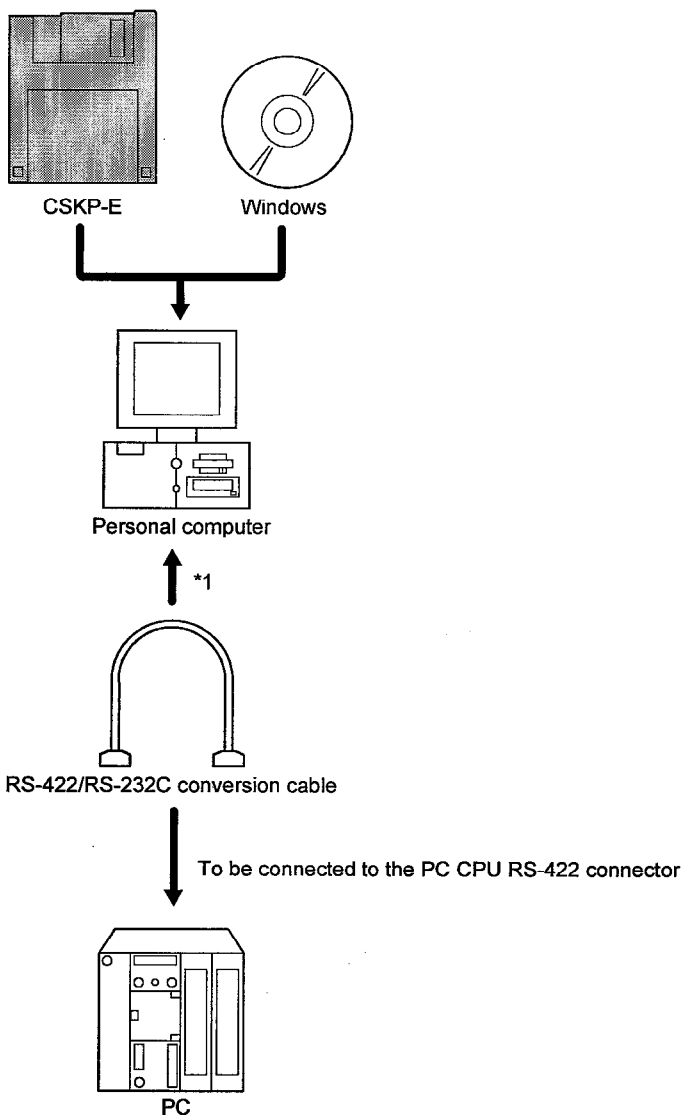
*1 For details of the connection method, refer to the pertinent manual for your Computer Link Module (serial communication).

(2) Ethernet communication



POINT
Access can be made in the same segment during Ethernet communication.

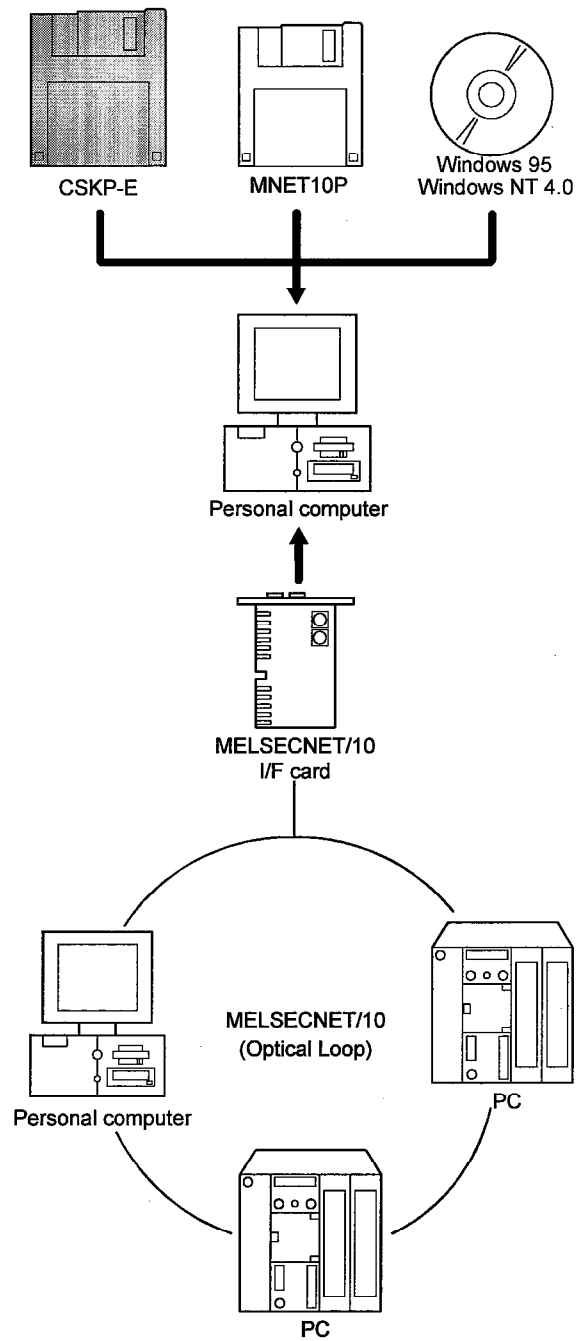
(3) RS-442 communication



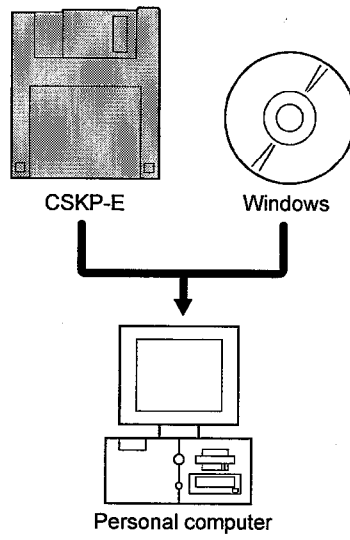
*1 Communication between the personal computer and PC CPU requires an RS-232C or RS-442 conversion cable.

(4) MELSECNET/10 communication (available under Windows 95 or Windows NT 4.0)

POINT
As MNETIOP is ready for Windows 98, MELSECNET/10 communication is not available when Windows 98 is used.



(5) EMED communication (available under Windows NT 4.0)



2.2 Operating Environment

The following table summarizes the CSKP-E operating environment.

Item	Description
Computer	Personal computer on which Windows 95, Windows 98 or Windows NT Workstation 4.0 can be run
OS	Windows 95, Windows 98 or Windows NT Workstation 4.0
CPU	Pentium 100MHz or faster
Display	Resolution: 640×480 or higher (Recommendation: 1024×768)
Memory size required	32MB or more
Free hard disk space	15MB or more
Disk drive	3.5-inch (1.44MB) floppy disk drive
Programming language	Visual Basic 4.0, Visual Basic 5.0, Visual C++ 4.2 or Visual C++ 5.0

2.3 Available PC CPUs

The following table lists the available PC CPUs.

	PC CPU
A series	A0J2H, A1S,A1S-S1, A1SH, A1SJ, A1SJH, A1N, A2C, A2CJ, A2N, A2N-S1, A2S, A2S-S1, A2SH, A2SH-S1, A2A, A2A-S1, A2U, A2U-S1, A2AS, A2AS-S1, A2AS-S30, A2AS-S60, A2AS-M128, A3N, A3A, A3U, A4U, A1FX
QnA series	Q2A, Q2A-S1, Q2AS, Q2AS-S1, Q2ASH, Q2ASH-S1, Q3A, Q4A, Q4AR

2.4 Available Modules

The following tables list the modules available when PC CPUs are accessed via the Computer Link Module (serial communication) and Ethernet module.

(1) Computer Link Module (serial communication)

	Available module
C24	A1SCPUC24-R2 *1, A1SJ71C24-PRF *2, A1SJ71C24-R2 *2, A2CCPUC24 *3, A2CCPUC24-PRF *3, AJ71C24-S6, AJ71C24-S8
UC24	AJ71UC24, AJ71UC24-PRF, A1SJ71UC24-R2, A1SJ71UC24-PRF
QC24	AJ71QC24, AJ71QC24-R2, AJ71QC24-R4 *4, A1SJ71QC24, A1SJ71QC24-R2, AJ71QC24N, AJ71QC24N-R2, AJ71QC24N-R4 *4, A1SJ71QC24N, A1SJ71QC24N-R2

- *1 Handled as the UC24-equivalent module.
- *2 Handled as the UC24-equivalent module when the software version of the module is "M" or later
- *3 Handled as the UC24-equivalent module when the software version of the module is "K" or later.
- *4 Ports on the terminal block cannot be used.

(a) Restrictions

The following table summarizes the restrictions on modules.

Restriction	Module
Not connectable to the RS-422/485 terminals. (This is because DC control is not supported.)	C24, UC24, QC24
Not accessible to the devices A, V, Z and the extended file register during QnA connection.	C24, UC24
Not possible to write in running the paired AnS (E ² PROM operation) or change the T/C value.	C24, UC24
Accessible as the AnA-equivalent module when mounted on AnU.	C24

(2) Ethernet module

	Available module
E71 *1	AJ71E71, AJ71E71-S3, A1SJ71E71-B2, A1SJ71E71-B5, A1SJ71E71-B2-S3, A1SJ71E71-B5-S3
QE71 *2	AJ71QE71, AJ71QE71-B5, A1SJ71QE71-B2, A1SJ71QE71-B5

- *1 Accessible as the AnA-equivalent module when mounted on AnU.
- *2 An error occurs when monitoring the same CPU takes place via the QnA Ethernet and the other communication path.

2.5 Available Interface Cards

The following table summarizes the interface cards available for communicating with the PC CPUs.

It is assumed that, when using Windows 98, the packaged driver cannot be used for the communication card, because the driver is not ready for Windows 98.

	Applicable Interface Cards
MELSECNET/10 communication	A70BDE-J71LP23GE

3 INSTALL AND UNINSTALL

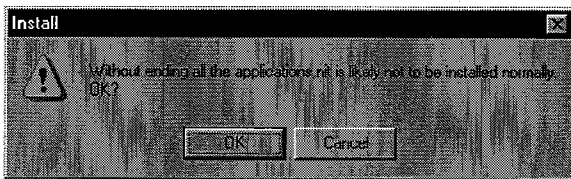
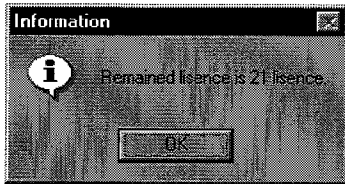
This chapter describes how to install and uninstall CSKP-E.

3.1 Install

This section describes how to install CSKP-E.

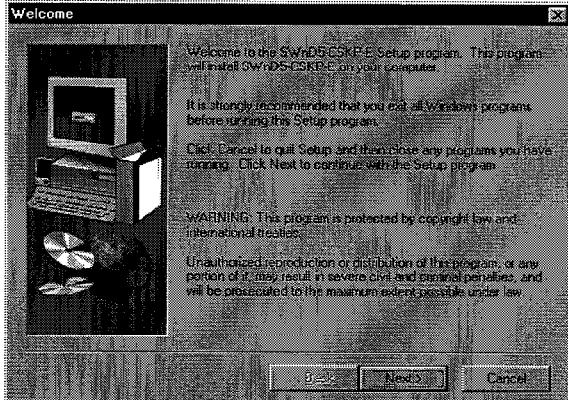
<p>POINTS</p> <ul style="list-style-type: none">· Each time installation occurs, the number of licenses decreases by one.· When the operating system (OS) is Windows NT 4.0, log on as a user with the administrator property.· Install CSKP-E after deleting all the applications listed in the startup menu and restarting Windows.· Don't set the write protect tab of the first floppy disk.· Once you install the CSKP-E, the utility programs in the following packages cannot be used any more. Use the utility programs in the CSKP-E instead.· SW1IVDWT-MNET10P

1. Switch on your personal computer, and Windows will start.
2. Insert the first FDD in the drive.
3. Run "SETUP.EXE."
4. After a while, the left-hand screen is displayed. Check the remaining number of licenses, then click the "OK" button. If the number of licenses has decreased to zero (0), you cannot perform the installation.
5. Confirm that all the applications have terminated, then click the "OK" button. When one or more applications are running, terminate all the applications.

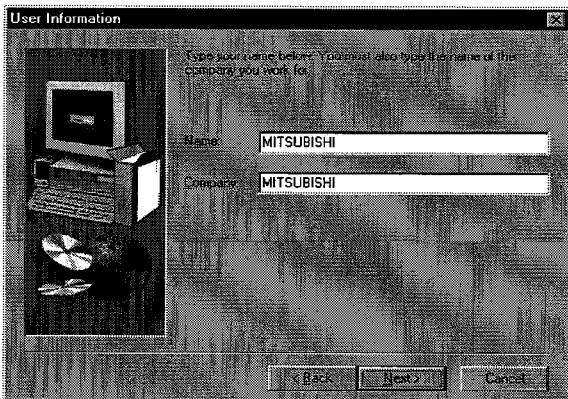


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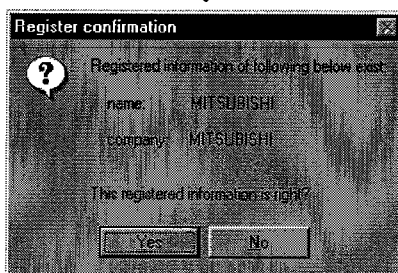
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6. Check the display text, then click the “Next>” button.



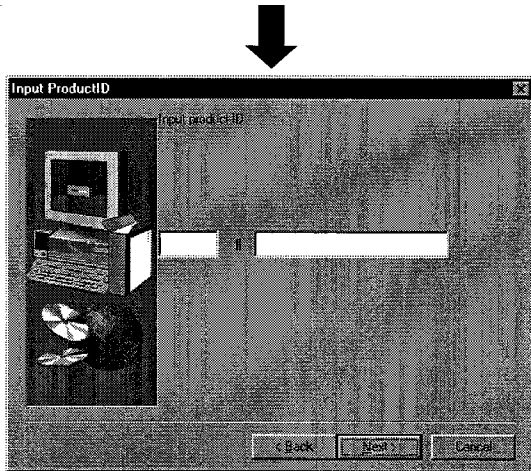
7. Enter your name and company name, then click the “Next>” button.



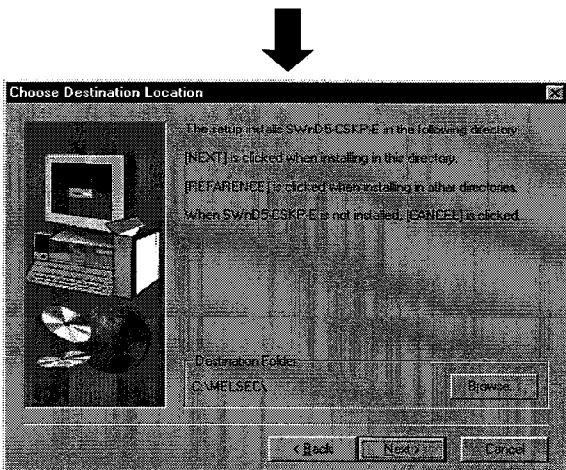
8. Check if the registered name and company name are correct. If they are correct, click the “Yes” button. To make changes, click the “No” button to display the preceding screen.

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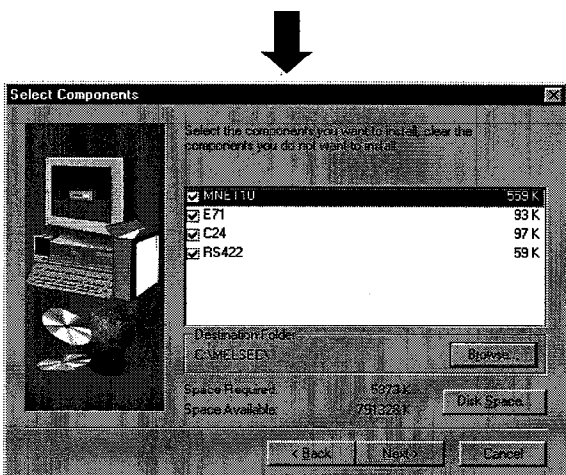
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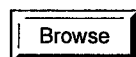
- 9. Input the product ID and click “Next>” button. The product ID is listed on the Software User Registration Card.




- 10. Designate a directory for installation. The CSKP-E default directory is “C:\MELSEC.” When using the default directory, click the “Next>” button. When not using the default directory for installation, click the “Browse...” button, then select another directory.



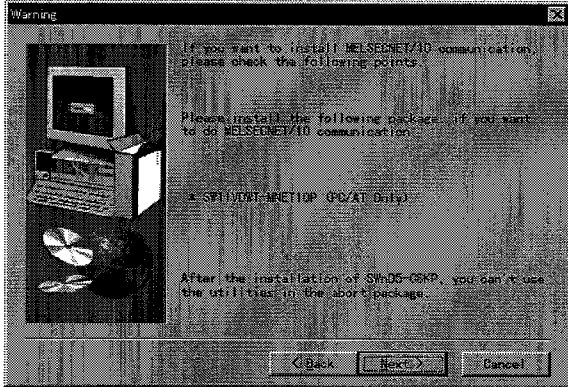
- 11. After setting an installation component and a directory for installation, click the “Next>” button.

 **Browse** Button ... Used to select a directory for installation.

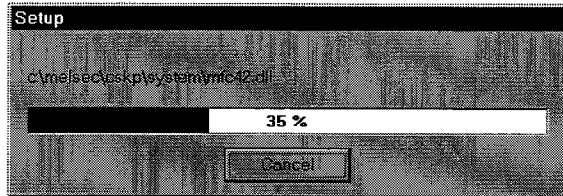
 **DiskSpace** Button ... Used to check the amount of free hard disk space.

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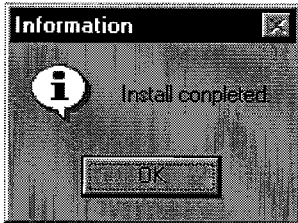
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12. Notes on the installation are displayed. Check them and click the “Next>” button.



13. Installation starts. Insert the floppy disks in order according to the instructions displayed.



14. After installation is complete, the left-hand dialogue box is displayed on the screen.

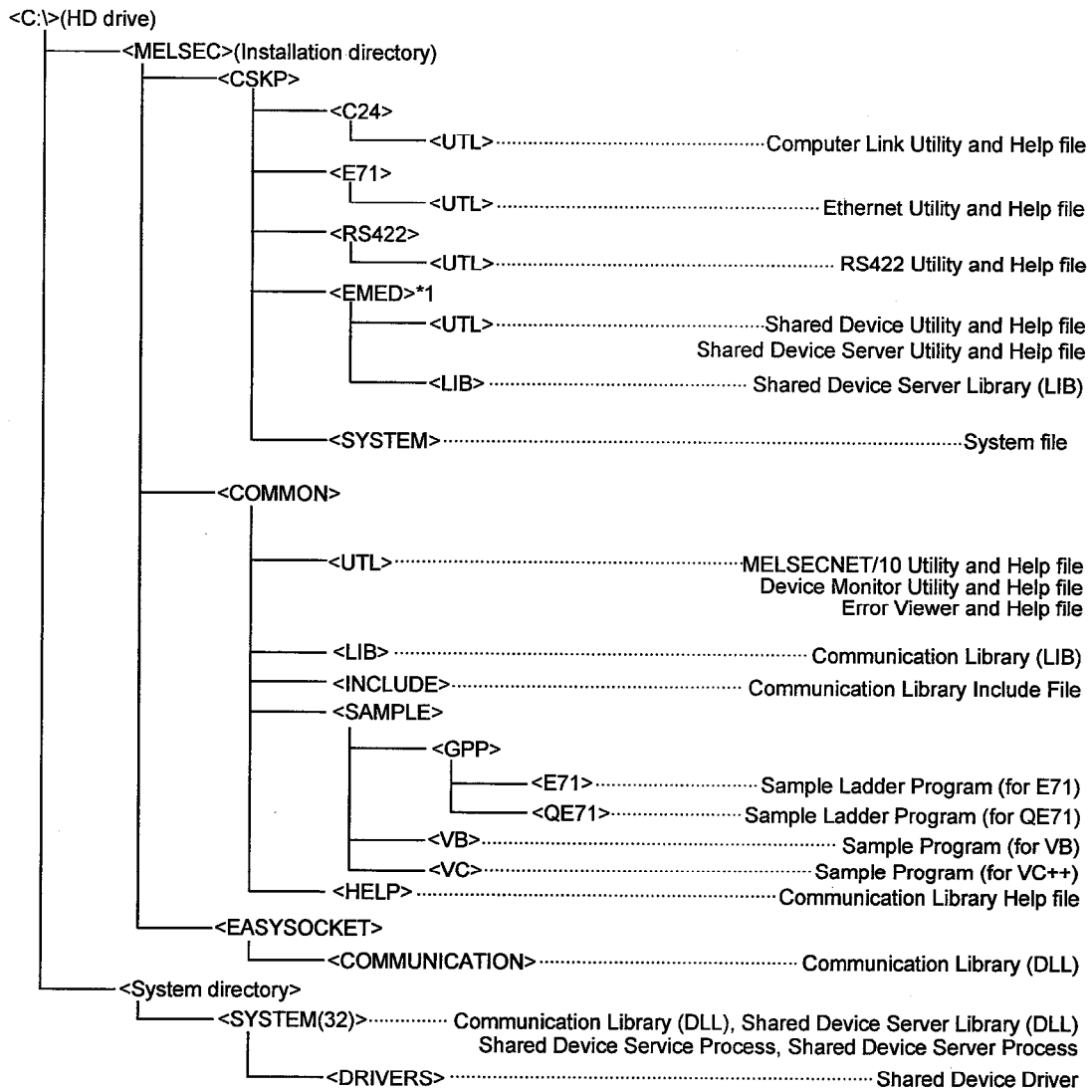
* After completion of installation, the number of licenses decreases by one.

POINT
If the installation fails, uninstall CSKP-E, then install it again.

3.2 Directory Structure

Once installation is complete, files are stored in the directories of the hard disk as follows.

When CSKP-E is installed using the default directory, it is stored in C:\MELSEC\.



*1 Created only when Windows NT 4.0 is used.

3.3 Registered Icons

Once CSKP-E is installed, the following icons are registered.

POINT
No icon is defined for utilities for communication paths that have not been selected during the installation.

(1) **COMMUNICATION SUPPORT(CSKP-E)**

The following icons are defined to [Start]-[Programs]-[MELSEC APPLICATION]-[COMMUNICATION SUPPORT(CSKP-E)].



C24 Link Utility
Starts the Computer Link Utility.



Device Monitor Utility.
Starts the Device Monitor Utility.



Error Viewer
Starts the Error Viewer.



Ethernet Utility
Starts the Ethernet Utility.



MELSECNET10 Utility
Starts the MELSECNET/10 Utility.



RS422 Utility
Starts the RS422 Utility.

(2) **EM ED (created only when Windows NT 4.0 is used)**

The following icons are defined to [Start]-[Programs]-[MELSEC APPLICATION]-[COMMUNICATION SUPPORT(CSKP-E)]-[EM ED].



EM ED Server Process
Starts the Shared Device Server Process.



EM ED Server Utility
Starts the Shared Device Server Utility.



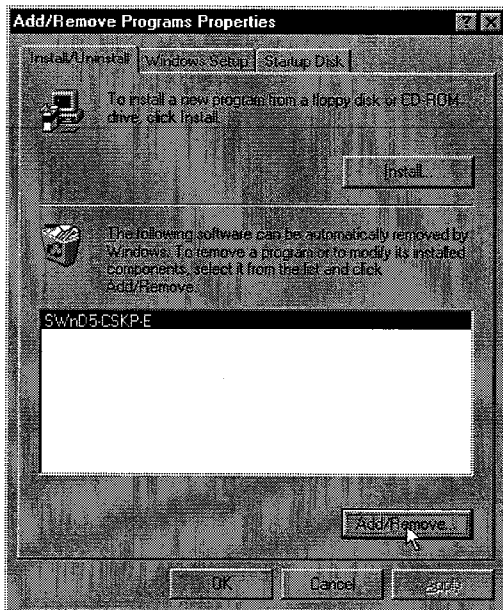
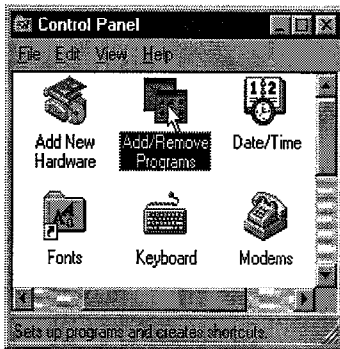
EM ED Utility
Starts the Shared Device Utility.

3.4 Uninstall

This section describes how to uninstall CSKP-E.

POINTS
<ul style="list-style-type: none">• The uninstaller should always be accessed from the Control Panel. Do not directly activate the installed program "Uninstaller.exe."• When software uninstallation occurs, the number of licenses decreases by one. To prevent this, be sure to uninstall the CSKP-E software prior to CSKP-E deletion. Once the CSKP-E directory and files are deleted via the Windows Explorer, the number of licenses cannot be restored.• Don't set the write protect tab of the first floppy disk.

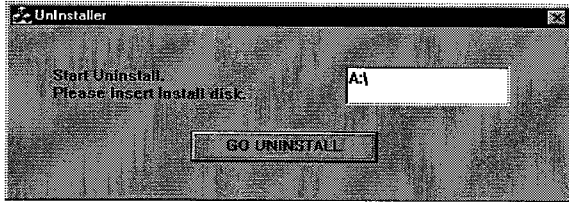
1. Click [Start]-[Settings]-[Control Panel] menu in order.
2. If the Control Panel appears, double-click "Add/Remove Programs."



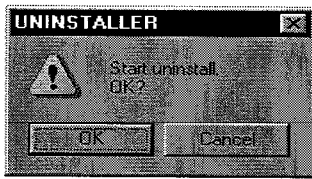
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3. Select "SWnD5-CSKP-E" , then click the "Add/Remove ..." button.

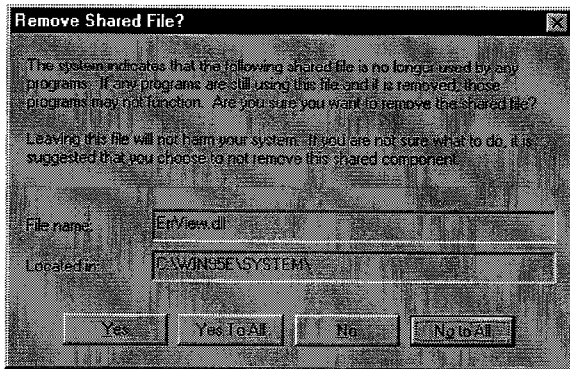
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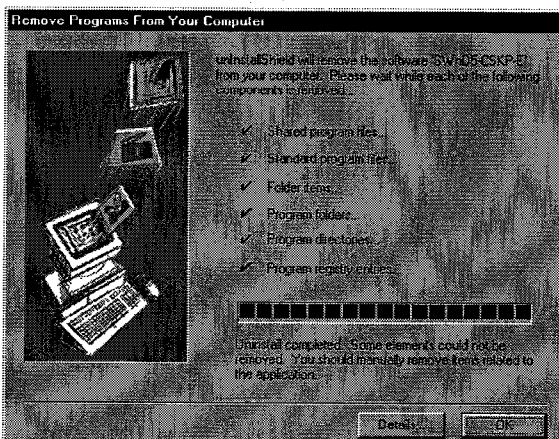
4. When the left-hand screen is displayed, insert the first floppy disk in the drive, then click the "GO UNINSTALL" button.



5. Click the "OK" button to start uninstallation.



6. When the left-hand screen is displayed, click the "No to All" button. When the "Yes" or "Yes To All" button is clicked, the shared files of the MELSEC software package are deleted and the other software package may not start normally.



7. When uninstallation is complete, click the "OK" button.

* After uninstallation, the number of licenses decreases by one.

APPENDICES

Appendix 1 Restrictions

(1) Use of the product on Windows NT

When Windows NT is used, the installation and use of the product is permitted only to users who have the Administrator authorization.

(2) Use of shared devices on Windows 95 or 98

Shared devices are set up using the service function offered by Windows NT. Operating systems other than Windows NT do not support shared devices.

Note, however, that a personal computer running Windows 95 or 98 can access shared devices in a personal computer running Windows NT

(3) Computer link communication and RS-422 communication on Windows 95

Communication via the COM port, such as the computer link communication and the RS-422 communication, will cause memory leaks if performed on Windows 95. Avoid continuous operation

(4) Multiple-thread communication

Multiple-thread communication is not allowed.

(5) Coexistence with the GPPW

If GPPW-E is involved in the computer link or RS-422 communication, it should not share the COM port used by the Communication Support Tool.

If GPPW-E is involved in the Ethernet communication, it should not share the Ethernet unit used by the Communication Support Tool.

(6) Communication via MELSECNET/10

Communication via MELSECNET/10 cannot be performed if Windows 98 is used as the operating system.

(7) Uninstalling

Uninstall SW0IVNT-CSKP-E before installing SW1D5F-CSKP-E. Note that the uninstalling procedure deletes the tab files, alarm summary files, and comment files that were installed with the default setup of SW0IVNT-CSKP-E.

(8) Overwriting installation

When a program is installed by overwriting, make sure to install in the same folder in which the program has already been installed.

(9) Startup menu

When CSKP-E is uninstalled, the entry may remain undeleted in the START MENU. In such a case, restart the personal computer.

(10) MELSECNET/10 utility programs

- Once you installed the CSKP-E, you no longer can use the MELSECNET/10 utility programs in the following package.

Instead of them, use the MELSECNET/10 utility programs provided by the CSKP-E.

- Once you installed the CSKP-E, do not activate a MELSECNET/10 utility program nor the board diagnosis utility program in the following package.

These programs may function abnormally.

- SW1IVDWT-MNET10P(for DOS/V)

Type SW1D5F-CSKP-E Basic Communication Support Tool Startup Manual

MODEL	SW1D5F-CSKP-E-S-E
MODEL CODE	1LMS35
IB(NA)66887-A(9809)MEE	

 **MITSUBISHI ELECTRIC CORPORATION**

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