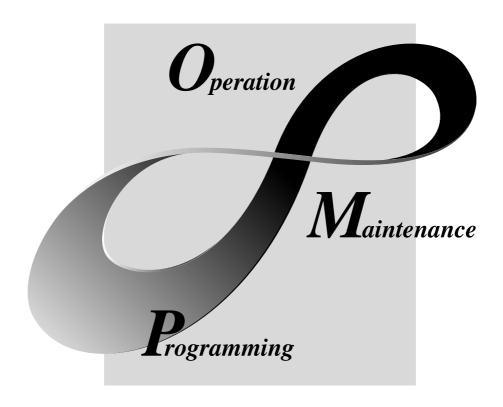
MITSUBISHI

Operating Manual





MELSOFT Integrated FA Software

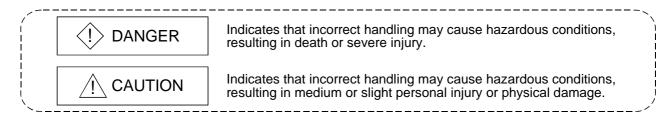
SW1D5C-RAS-E

• SAFETY PRECAUTIONS •

(Always read these instructions before using this equipment.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.

The instructions given in this manual are concerned with this product. For the safety instructions of the programmable controller system, please read the CPU module user's manual. In this manual, the safety instructions are ranked as "DANGER" and "CAUTION".



Note that the ACAUTION level may lead to a serious consequence according to the circumstances. Always follow the instructions of both levels because they are important to personal safety.

Please save this manual to make it accessible when required and always forward it to the end user.

[Design Instructions]

↑ CAUTION

• The user should take necessary measures when the PLC system must be secured against illegal access from external devices via the Internet.

REVISIONS

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

Print Date Dec., 2001	* Manual Number SH (NA) 080204-A	Revision
Dec., 2001	SH (NA) 080204-A	First edition

Japanese Manual Version SH-080203-B

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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. 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

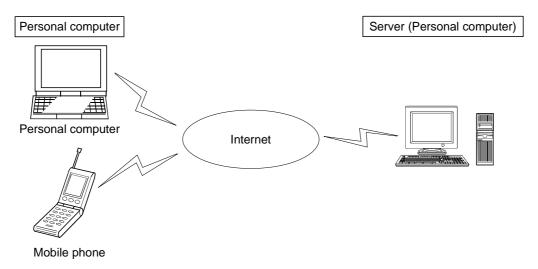
Manual Name		Manual Number (Model Code)
GX Developer Version7 Operating Manual		011.000400
Describes the online functions of GX Developer including the programming procedure, printing out		SH-080166 (13JU14)
procedure, monitoring procedure, and debugging procedure.	(Sold separately.)	(**************************************

A-5

How to Use This Manual

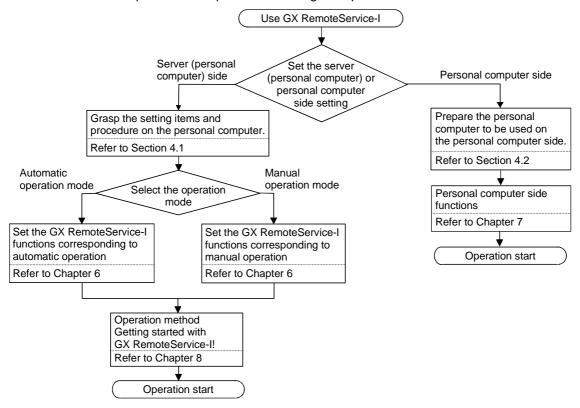
"How to Use This Manual" is described purpose by purpose for use of GX RemoteService-I. Refer to the following description and use this manual.

This system is divided into a personal computer and a server (personal computer). The system can be introduced smoothly by making actual setting while checking the purposes and setting sequence in the following flowchart.



For the server (personal computer) setting, set the automatic or manual operation mode

The personal computer side setting is required.



(1) When you want to know features or automatic or manual operation (Section 1.1, Section 1.2)

Section 1.1 gives the features.

Section 1.2 describes automatic operation and manual operation.

(2) When you want to know the operating environment of GX RemoteService-I (Section 2.2)

Describes the specifications of the personal computer used on the server (personal computer) side.

- (3) When you want to know the initial setting of the server (personal computer) and personal computer (Section 4.1, Section 4.2)

 Describes the procedures for setting the personal computer used on the server (personal computer) side and the personal computer used on the personal computer side.
- (4) When you want to know the functions set with the server (Chapter 6)

Provides the detailed explanation of the functions to be set. Also gives the explanation of the easy and convenient Wizard for use.

- (5) When you want to know the functions of the personal computer (Section 7.1 to Section 7.4) Describes the procedure for monitoring devices and comments from the personal computer.
- (6) When you want to operate GX RemoteService-I anyhow (Chapter 8) Explains the procedures for setting the server (personal computer), sending email and making access from the personal computer to the server (personal computer).
- (7) When you want to know the actions to be taken at occurrence of problems (Chapter 9) Describes the troubleshooting to avoid trouble.
- (8) When you want to know restrictions (Appendices)
 Describes the restrictions on use of GX RemoteService-I.

About the Generic Terms and Abbreviations

Unless otherwise specified, this manual uses the following generic terms and abbreviations to describe GX RemoteService-I.

Generic Term	/Abbreviation	Description	
GX RemoteService-I		Generic product name of the product types SWnD5C-RAS-E, SWnD5C-RAS-EA.	
PWS		Generic term for Personal Web Server.	
IIS		Generic term for Internet Information Server.	
Web server soft	ware	Generic term for Personal Web ServerInternet Information Serve.	
Windows® 2000		Microsoft® Windows® 2000 Professional Operating System.	
WindowsNT® 4.0	0	Microsoft® WindowsNT® Workstation 4.0 Operating System.	
Windows® 98		Microsoft® Windows® 98 Second Edition Operating System.	
Windows [®]		Microsoft® Windows® 98 Operating System. Microsoft® WindowsNT® Workstation 4.0 Operating System. Microsoft® Windows® 2000 Operating System.	
Qn(H)CPU		Generic term Q02(H),Q06H,Q12H,Q25HCPU.	
Q00J,Q00,Q01C	PU	Generic term Q00J,Q00,Q01CPU.	
QCPU(A mode)		Generic term Q02(H)-A,Q06H-A.	
QnACPU		Generic term Q2A,Q2AS(H),Q2AS1,Q2AS(H)S1,Q3A,Q4A,Q4AR.	
AnN,AnA,AnS,AnSHCPU		Generic term A0J2H,A1FX,A1S(S1),A1SJ,A1SH,A1SJH,A1N,A2C,A2CJ,A2N(S1), A2S(S1),A2SH(S1),A3N,A2A(S1).	
AnU,A2AS		Generic term A2U(S1),A3U,A4U, A2AS(S1),A2AS-S30,A2AS-S60,A3A.	
MOTION(SCPU))	Generic term A171SH,A172SH,A173UH(S1)A273UH(S3).	
FXCPU		Generic term FX0(S),FX0N,FX1,FXU,FX2C,FX1S,FX1N,FX2N(C).	
Computer link Unit	For A series	Generic termA1SJ71C24-R2,A1SJ71C24-R4,A1SJ71C24-PRF,A2CCPUC24, A2CCPUC24-PRF,A1SCPUC24-R2.	
Onit	For AnU	Generic term AJ71UC24,A1SJ71UC24-R2,A1SJ71UC24-R4,A1SJ71UC24-PRF.	
Serial communication	For QnA series	Generic termAJ71QC24,AJ71QC24-R2,AJ71QC24-R4,AJ71QC24N,A1SJ71QC24, A1SJ71QC24-R2,AJ71QC24N-R2,AJ71QC24N-R4,A1SJ71QC24N, A1SJ71QC24N-R2.	
unit	For Q series	Generic term QJ71C24,QJ71C24-R2.	
C24		Computer link Unit, Serial Communication Unit.	
QE71		AJ71QE71AJ71QE71-B2AJ71QE71-B5A1SJ71QE71-B5.	
E71		AJ71E71-S3,A1SJ71E71-B2-S3,A1SJ71E71-B5-S3,A1SJ71E71-B2,A1SJ71E71-B5.	
Q series-compatible E71		Generic term QJ71E71,QJ71E71-B2,QJ71E71-100.	
MELSECNET/10 board		Generic term A70BDE-J71QLP23/A70BDE-J71QLP23G/A70BDE-J71QLR23/A70BDE-J71QBR13 MELSECNET/10 interface board.	
MELSECNET/H board		Generic term Q80BD-J71LP21-25/Q80BD-J71LP21G(E)/Q80BD-J71BR11 MELSECNET/H interface board.	
Ethernet board		Ethernet PC card, Ethernet I/F board.	
CC-Link board		Generic term A80BDE-J61BT11/A80BDE-J61BT13 CC-Link interface board.	
CPU board		Generic term A80BDE-A2USH-S1 PLC CPU board.	

Product Makeup

GX RemoteService-I are made up of the following products.

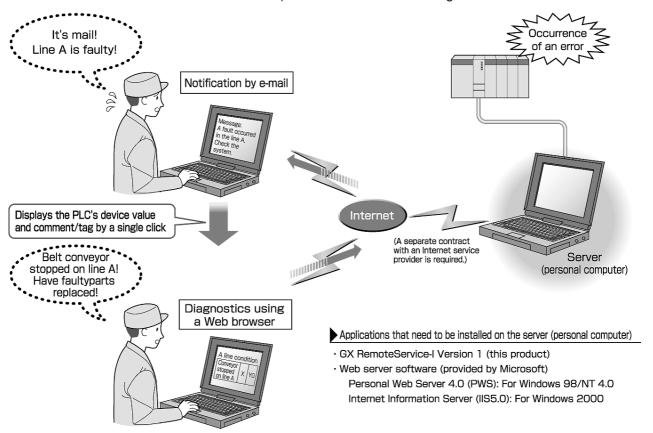
Product Name		Quanity
SW1D5C-RAS-E	GX RemoteService-I Version1 (1-license product)	1 (CD-ROM)
	License agreement	1
	Software registration Card	1
	End-user software license agreement	1
SW1D5C-RAS-EA	GX RemoteService-I Version1 (Multiple license product)	1 (CD-ROM)
	License agreement	1
	Software registration Card	n*1
	End-user software license agreement	1

^{*1:} The same number of software registration card as that of license are packed with the product.

1. OVERVIEW

1.1 Features

GX RemoteService-I allows you to monitor/diagnose the PLC CPU status (read devices and comments) from a remote location using the Internet.



(1) PLC CPU can be monitored/diagnosed via the Internet The personal computer allows you to know the PLC status.

(2) This system can be introduced without any modification to the existing system

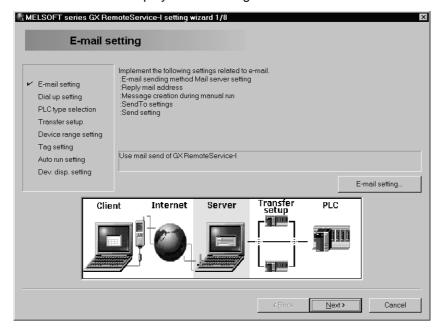
No dedicated special modules are required to use this product. In addition, you need not change the parameter values since this product does not require I/O points.

(3) Wizard ensures ease of various settings

Using the Wizard for settings, you can easily set the following items necessary for the server (personal computer).

Setting items

- e-mail setting
- Dialup setting
- PLC type setting
- Connection setup
- Device range setting
- Tag setting
- Automatic operation setting
- · Device display format setting

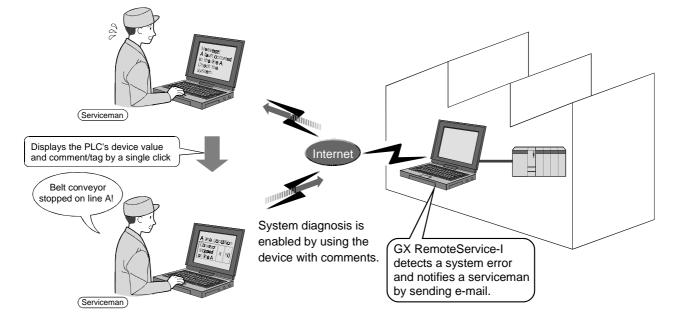


1 OVERVIEW MELSOFT

1.2 About Automatic Operation and Manual Operation

GX RemoteService-I allows you to select the automatic or manual operation mode. The features of the automatic and manual operation modes are explained below. They will be helpful for you when constructing a system.

(1) When the server (personal computer) is always connected to the system for monitoring (automatic operation mode) GX RemoteService-I always monitors the PLC CPU devices. If a fault has occurred in the system, GX RemoteService-I connects with the Internet automatically and informs the personal computer of the fault by e-mail. (The condition for triggering the transmission of e-mail that notifies the personal computer of a system fault is to be set to the server (personal computer).) Hence, a serviceman can be notified of an error definition within a short time after occurrence of a fault.

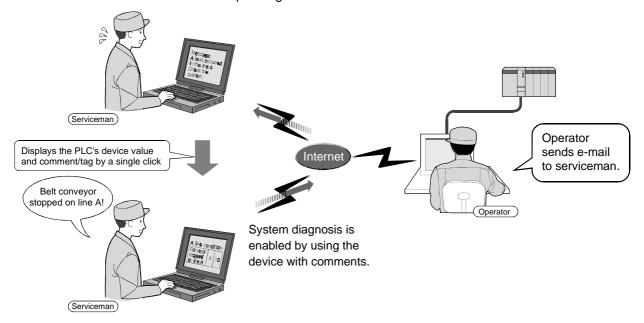


1 OVERVIEW MELSOFT

(2) When an operator judges a fault and contacts a serviceman (manual operation mode)

If a fault has occurred in the system, an operator can make judgment to notify a serviceman of the faulty condition.

The serviceman can diagnose the actual system from a remote location to run more in-depth diagnostics.



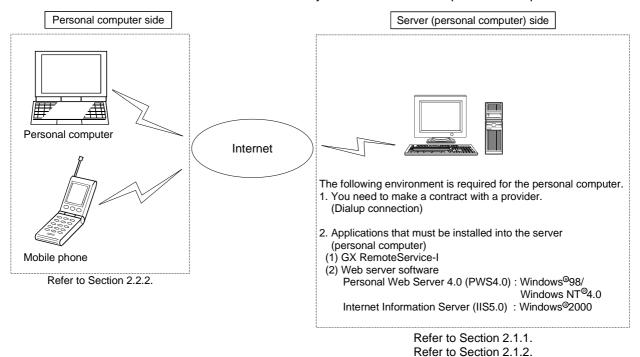
2. SYSTEM CONFIGURATION

2.1 System Device List

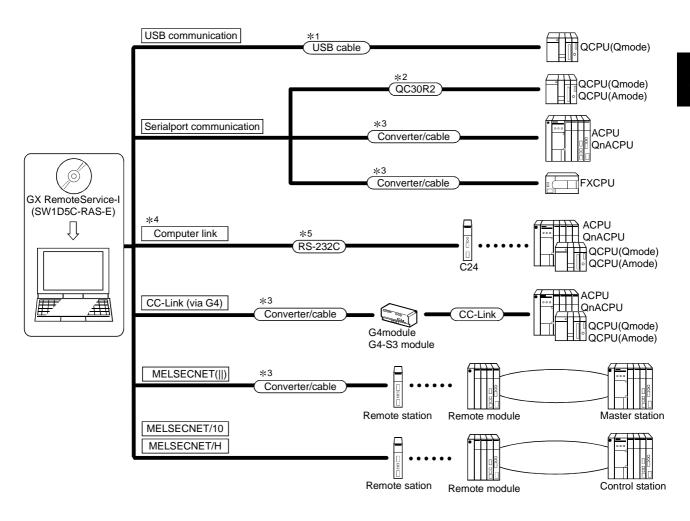
This section explains the system configuration that uses GX RemoteService-I. Refer to Section 2.1.1, Section 2.1.2 and Section 2.1.3 for the system device lists of the server (personal computer).

Refer to Section 2.1.3. Refer to Section 2.2.1.

Refer to Section 2.2.2 for the system device list of the personal computer.



2.1.1 Connection from the serial port



- *1: About the USB cable (QCPU (Q mode) compatible)
 - (1) Usable with Windows® 98/ME/2000 when the USB driver has been installed.
 - (2) Unusable for Windows® 95, WindowsNT® 4.0.
 - (3) Use of the USB cable allows only one PLC CPU to be connected.
 - (4) Use the UBS cable which conforms to the USB Standard Rev. 1.1.
 - (5) The following indicates the precautions for and restrictions on communications made using the USB cable.
 - A communication error may occur if you set the resume function, suspend setting, power saving function or standby mode of the server (personal computer) to make communications with the PLC CPU. Hence, do not set any of the above functions when making communications with the PLC CPU.
 - Frequently connecting/disconnecting the USB cable, resetting the PLC CPU or switching power OFF/ON during communications with the PLC CPU may cause a communication error from which the system may not be recovered.
 - Where possible, therefore, exit from GX RemoteService-I before connecting/disconnecting the USB cable, resetting the PLC CPU or switching power OFF/ON.
 - If the system cannot be recovered from the communication error, completely disconnect the USB cable once and reconnect it after more than five seconds have elapsed. (An error may occur at the first communication after this operation, but the system will function properly after the second time and later.)
 - 3) A communication error may occur depending on the combination of the server (personal computer) model, USB cable and others. In that case, refer to the messages and perform operation again.
- *2: About the cable (QCPU (Q mode), QCPU(A mode) compatible) For communication in 115.2/57.6kbps

Fast communication cannot be made if the Personal computer used is not compatible with the communication speed of 115.2/57.6kbps.

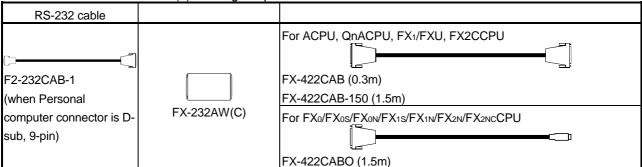
If a communication error occurs, reduce the baud rate setting and restart communication.

The following cable has been confirmed by Mitsubishi Electric that it will work properly.

Using the cable of Mitsubishi Electric make

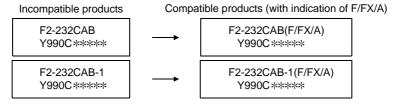
Coming and cause of mineral in an incident management of the control of the contr	
RS-232 cable	
QC30R2 (when Personal computer connector is D-sub, 9-pin)	

- *3: About the converter/cable (ACPU, QnACPU, FXCPU compatible)
 - (1) Using the products of Mitsubishi Electric make.



 How to identify compatibility of the F2-232CAB and F2-232CAB-1 cables with the ACPU and QnACPU

Check the indication of the model label attached to the cable.

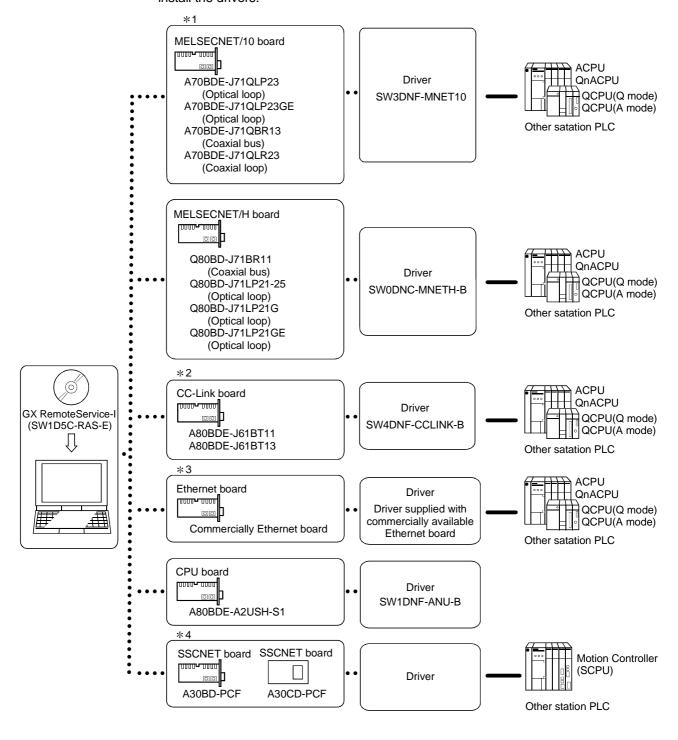


- *4: About the modems relayedUse the straight cables supplied with the modems.
- *5: About computer link For the RS-232C cable, refer to the GX Developer Operating Manual.

2.1.2 Connection from the interface boards

The following system configuration is made up by connection from the interface boards.

Refer to the corresponding board manuals for the way to connect the boards and install the drivers.



*1: MELSECNET/10 board

The following table indicates the drivers that cannot be used with the specific Operating Systems.

Driver Name	Operating Systems
SW3DNF-MNET10	Cannot be used with Windows® Me/2000.
SW0DNC-MNETH-B	Cannot be used with Windows® Me.

If a communications error takes place, an error code is indicated in the least significant 4 digits.

Refer to the error code list of the MELSECNET/10 board manual.

*2: CC-Link board

The A80BDE-J61BT11 allows setting of the master/local station.

The A80BDE-J61BT13 is accessible only when local station setting has been made.

*3: Ethernet board

(1) The following Ethernet boards/cards have been confirmed by Mitsubishi Electric to operate properly.

	Maker Name	Model
	3COM make	Ethernet Link III LAN PC Card
	Allied Telesis make	Center COM LA-PCM Ethernet PC
Ethernet board/card		Card LAN Adapter
	TDK make	10BASE-T LAN card
		(Model: LAN-CD021BX)
Ethernet board	Allied Telesis make	RE2000 (ISA)

*4: SSCNET board/card

Use the personal computer where Windows NT® 4.0 (Service Pack 2) or later has been installed.

2.1.3 System equipment lists

(1) The following list indicates module connectable from the serial port.

PC Series	Module Name	Module Model
	DI C CDI I madula	Q00J, Q00, Q01, Q02(H), Q06H, Q12H, Q25H
	PLC CPU module	Q02(H)-A, Q06H-A
Q Series	Serial communication module *1	QJ71C24, QJ71C24-R2
	MELSECNET/H network remote I/O module	QJ72LP25, QJ72BR15
	G4-S3 module	AJ65BT-G4-S3
	PLC CPU module	Q2A, Q2AS(H), Q2AS1, Q2AS(H)S1, Q3A, Q4A, Q4AR
		AJ71QC24, AJ71QC24-R2, AJ71QC24-R4,
	Serial communication module *2	AJ71QC24N, A1SJ71QC24, A1SJ71QC24-R2,
	Serial communication module *2	AJ71QC24N-R2, AJ71QC24N-R4, A1SJ71QC24N,
QnA Series		A1SJ71QC24N-R2
	MELSECNET/10 network remote I/O module	AJ72QLP25, AJ72QBR15, A1SJ72QLP25,
	WELSEGNE 1/10 Helwork Terriote 1/0 Hiodule	A1SJ72QBR15
	G4 module	AJ65BT-G4
	G4-S3 module	AJ65BT-G4-S3
		A0J2H, A1S(S1), A1FX, A1SJ, A1SH, A1SJH, A1N,
	PLC CPU module	A2C, A2CJ, A2N(S1)A2S(S1), A2SH(S1), A3N,
	T LO OF O Module	A2A(S1), A3A, A2U(S1), A2AS(S1), A2AS-S30,
		A2AS-S60, A3U, A4U
		AJ71UC24, A1SJ71UC24-R2,
	Computer link module *3	A1SJ71UC24-PRF, A1SJ71C24-R2, A1SJ71C24-PRF,
A Series	Computer link module 10	AJ71C24-S6, AJ71C24-S8, A1SCPUC24-R2,
		A2CCPUC24, A2CCPUC24-PRF
	MELSECNET(II) data link remote I/O module	AJ72P25, AJ72R25
	MELSECNET/B data link remote I/O module	AJ72T25B, A1SJ72T25B
	MELSECNET/10 data link remote I/O module	AJ72LP25, AJ72LP25, AJ72BR15
	G4 module	AJ65BT-G4
	G4-S3 module	AJ65BT-G4-S3
FX Series	PLC CPU module	FX0(S), FX0N, FX1, FXU, FX2C, FX1S, FX1N, FX1N, FX2N(C)
MOTION (SCPU)	PLC CPU module	A171SH, A172SH, A173UH(S1), A273UH(S3)

(2) The following table indicates the modules which can be connected from the USB

PC Series	Module Name	Module Model
Q Series	PLC CPU module	Q02H, Q06H, Q12H, Q25H

(3) The following table indicates the modules which can be connected from the MELSECNET/H board.

PC Series	Module Name
Q Series	QJ71LP21, QJ71BR11, QJ71LP21-25

(4) The following table indicates the modules which can be connected from the MELSECNET/10 or MELSECNET/H (MELSECNET/10 mode) board.

PC Series	Module Name	
Q Series	QJ71LP21, QJ71BR11	
	QJ71LP21, QJ71BR11, QJ71LP21-25	
QnA Series	AJ71QLP21, AJ71QBR11, A1SJ71QLP21, A1SJ71QBR11	
A Series	AJ71LP21, AJ71BR11, A1SJ71LP21, A1SJ71BR11	

(5) The following list indicates modules connectable from the CC-Link board.

PC Series	Module Name	
Q Series	QJ61BT11	
QnA Series	AJ61QBT11, A1SJ61QBT11	
A Series	AJ61BT11, A1SJ61BT11	

(6) The following list indicates modules connectable from the Ethernet board.

PC Series	Module Name		
Q Series	QJ71E71, QJ71E71-B2, QJ71E71-100		
QnA Series	AJ71QE71, AJ71QE71-B5, A1SJ71QE71-B2, A1SJ71QE71-B5		
A Series	AJ71E71-S3, A1SJ71E71-B2-S3, A1SJ71E71-B5-S3, A1SJ71E71-B2, A1SJ71E71-B5		

(7) The following table indicates the modules which can be connected from the SSCNET board

PC Series	Module Name	
MOTION(SCPU)	A171SH, A172SH, A173UH(S1), A273UH	

*1: The following table indicates whether the interfaces may be connected to the personal computer when the PLC CPU is accessed from the personal computer via the serial communication module (Q series). If the module cannot be connected directly with the personal computer, it may be usable as the "n"th module of multidropping.

Type	Interface	1:1	Multidropping	
Type	mienace	Connection	First module	"n"th module
QJ71C24	RS-232C	0	0	×
	RS-422/485	×	×	0
O 174 C 24 D 2	RS-232C	0	×	×
QJ71C24-R2	RS-232C	×	×	×

*2: The following table indicates whether the interfaces may be connected to the personal computer when the PLC CPU is accessed from the personal computer via the serial communication module (QC24). If the module cannot be connected directly with the personal computer, it may be usable as the "n"th module of multidropping.

Turpo	Interface	1:1	Multidropping	
Туре	interface	Connection	First module	"n"th module
AJ71QC24	RS-232C	0	0	×
AJ/TQC24	RS-422/485	×	×	0
AJ71QC24N	RS-232C	0	0	×
AJ/TQC24N	RS-422/485	×	×	0
AJ71QC24-R2	RS-232C	0	×	×
AJ/TQC24-R2	RS-232C	×	×	×
AJ71QC24N-R2	RS-232C	0	×	×
707 1Q02+11-112	RS-232C	×	×	×
AJ71QC24-R4	RS-422	×	×	×
707 TQO2+-114	RS-422/485	×	×	0
AJ71QC24N-R4	RS-422	×	×	×
A37 TQC2411-N4	RS-422/485	×	×	0
A1SJ71QC24	RS-232C	0	0	×
A1007 1Q024	RS-422/485	×	×	0
A1SJ71QC24N	RS-232C	0	0	×
A13371QC24N	RS-422/485	×	×	0
A1SJ71QC24-R2	RS-232C	0	×	×
A 1007 1Q024-R2	RS-232C	×	×	×
A1SJ71QC24N-	RS-232C	0	×	×
R2	RS-232C	×	×	×

*3: About the computer link module

Note that when the PLC CPU is accessed from the personal computer via the computer link module, the modules that may be connected directly with the personal computer are limited.

If the module cannot be connected directly with the personal computer, it may be usable as the "n"th module of multidropping.

Time	luta wfa a a	1:1	Multidropping	
Type	Interface	Connection	First module	"n"th module
AJ71UC24	RS-232C	0	0	×
AJ710C24	RS-422/485	×	×	0
AJ71C24-S6	RS-232C	0	0	×
AJ7 1024-30	RS-422	×	×	0
AJ71C24-S8	RS-232C	0	0	×
A37 1024-30	RS-422	×	×	0
A1SJ71UC24-R2	RS-232C	0	×	×
A1SJ71C24-R2	RS-232C	0	×	×
A1SJ71UC24- PRF	RS-232C	0	×	×
A1SJ71C24-PRF	RS-232C	0	×	×
A1SJ71UC24-R4	RS-422/485	×	×	0
A1SJ71C24-R4	RS-422/485	×	×	0
A1SCPUC24-R2	RS-232C	0	×	×
	RS-232C	0	0	×
A2CCPUC24	RS-422	×	×	×
	RS-422/485	×	×	0
4000DIIII00 <i>t</i>	RS-232C	0	0	×
A2CCPUUC24- PRF	RS-422	×	×	×
	RS-422/485	×	×	0

2.2 Operating Environment

2.2.1 Server (personal computer)

The operating environment used by the server (personal computer) is indicated below. To use the server (personal computer), you need to make a contract with a provider.

Item		Description		
Computer main unit		Pentium® 200 MHz or faster (recommended) based personal computers that are compatible with Windows® operating system		
Required memory		64MB or more (recommendation)		
Required hard disk	For installation	100 MB or more		
space	For operation	100 MB or more		
Disk drive		CD-ROM drive		
Monitor		Resolution 800x600 dot or higher		
Modem		Modem that can be connected to the provider		
Operating system (OS)		Microsoft® Windows® 98 Second Edition Operating System Microsoft® WindowsNT® Workstation 4.0 Operating System Microsoft® Windows® 2000 Professional Operating System		

^{*:} Windows® Me cannot be used with this product since it does not support the PWS server.

IMPORTANT

1) Required software

The Web server software must be installed into the server (personal computer). Note that the Web server software to be installed depends on the used operating system (OS).

Refer to Chapter 5 for the installation method.

The following Web server software programs have been confirmed by Mitsubishi Electric to operate properly.

Used OS	Installed Software
Microsoft® Windows® 98 Second Edition Oprating System	Personal Web Server 4.0
Microsoft® WindowsNT® Workstation 4.0 Operating	(PWS4.0)
System	
Microsoft® Windows® 2000 Professional Operating	Internet Information
System	Server 5.0(IIS5.0)

- Any server software other than the above is unusable.
- Set up Windows® 98 or Windows® 2000 when installing the operating system (OS).
- Set up WindowsNT® 4.0 when installing Service Pack 3 or later and Option Pack. (WindowsNT® 4.0 Service Pack 3 or later and Option Pack are available by downloading them from the Microsoft Corporation home page or by CD-ROM sending service.)
- Refer to the help function of Windows® for the installation method and others of the server software.

2 - 11 2 - 11

- Contract with provider
 Prepare a server (personal computer) that can browse home pages and send
 e-mail.
- Dialup connection
 You must dial up your provider to connect with the Internet.

2.2.2 Personal computer

The necessary environment is as follows.

Used Device	Description
When using a personal	Personal computer where the Web browser has been installed
computer.	(Microsoft® Corporation's Internet Explorer 4.0 or later or Netscape
	Communication Corporation's Netscape Communicator 4.0 or later)
When using a mobile	i mode compatible mobile phone
phone.*	J-Sky compatible mobile phone
	Ezweb compatible mobile phone

^{*:} This product can be used only in Japan.

[•] You need to make a contract with a provider.

3. FUNCTION LIST

This chapter lists the items to be set on the server (personal computer) and the items to be set on the personal computer.

3.1 Server (Personal Computer) Function List

The following table lists the functions to be set on the server (personal computer).

Function Name	Description	Reference
Operating mode	Sets the automatic or manual operation mode.	Section 6.1
Starts AUTO run	Starts the continuous monitoring of devices in the automatic operation mode.	1
Dial up execute	Makes dialup connection to connect with the Internet.	1
URL copy	Copies the URL of the server (personal computer).	Section 6.2
Send e-mail	Sends e-mail created with GX RemoteService-I.	1
Product information	Displays the version and others of the product.	
E-mail setting	Makes settings related to e-mail (mail server, account name, etc.). Also creates a message for manual operation.	Section 6.3.1
Dial up setting	Selects the dialup connection name. Also selects the method for terminating dialup connection.	Section 6.3.2
PLC type selection	Selects the PLC type of the PLC to be monitored on the personal computer.	Section 6.3.3
Transfer setup	Selects the path of the PLC to be monitored on the personal computer.	Section 6.3.4
Device range setting	Makes settings related to the device to be monitored on the personal computer.	Section 6.3.5
Tag setting	Makes setting for handling the read devices as tags.	Section 6.3.6
Auto run setting	Sets the device to be monitored continuously in the automatic operation mode.	Section 6.3.7
Dev. disp. setting	Changes the display format of the screen displayed on the personal computer.	Section 6.3.8

3

3.2 Personal Computer Side Function List

3.2.1 Monitor functions

The following table lists the functions to be set with the personal computer.

Reference		Description	Reference
Tag display		Performs one-shot monitoring of the tag set on the server (personal computer) side.	Section 7.2
Transfer setup	_	Sets the PLC series, PC side I/F, PLC side I/F and other station.	
Device display	Device range setting	Sets the device to be monitored.	Section 7.1
	Device comment search	Makes a device comment search.	
	Word (Dec)	Displays devices in a word multi-point decimal format.	
	Word (Hex)	Displays devices in a word multi-point hexadecimal format.	
	Bit	Displays devices in a bit multi-point format.	Castion 7.0
	Comment Dec	Displays devices in a commented decimal format.	Section 7.3
	Comment Hex	Displays devices in a commented hexadecimal format.	
	Comment Bin	Displays devices in a commented binary format.	

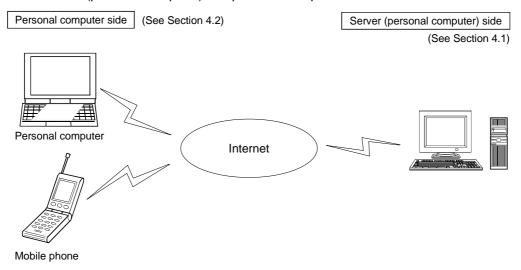
3.2.2 Functions to cut off server (personal computer) line from personal computer

The following table lists the functions that disconnect the server (personal computer) line from the personal computer.

Reference	Description	Reference
Server Side Circuit Settings Time to	Sets the server (personal computer) line disconnection timer.	
disconnect the circuit		0
Server Side dialup disconnect	Disconnects the server (personal computer) line.	Section 7.4
execution		

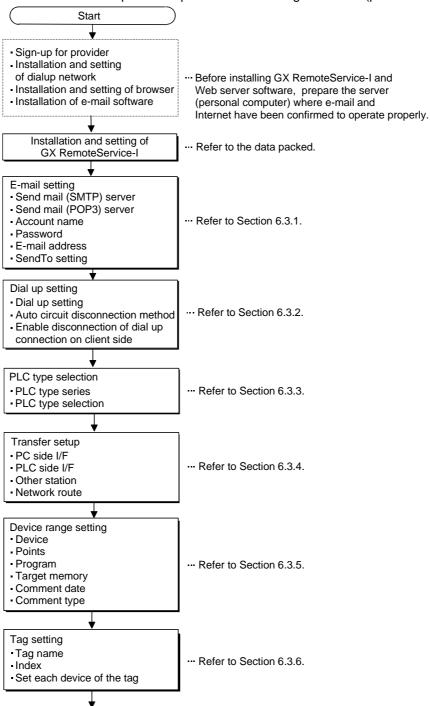
4. PRE-OPERATION SETTINGS AND PROCEDURES

This chapter explains the setting items and procedures necessary for the server (personal computer) and personal computer.

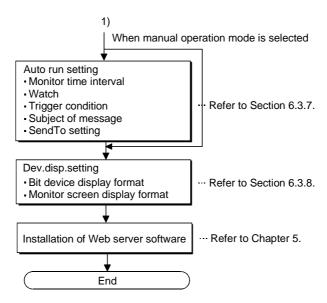


4.1 Server (Personal Computer) Setting Procedure

This section explains the procedure for setting the server (personal computer).

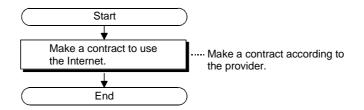


1)



4.2 Personal Computer Setting Procedure

This section explains the items to be set on the personal computer. When making access from the personal computer to the server (personal computer), make a contract to use the Internet with the personal computer.



POINT

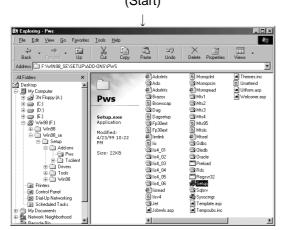
Refer to Section 2.2.2 for the environment of the usable personal computer.

5. INSTALLATION OF WEB SERVER SOFTWARE

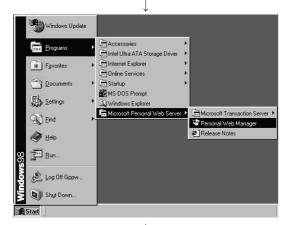
For the installation and uninstallation operations of this product (GX RemoteService-I), refer to "How to Install the MELSOFT Series" packed with the utility package.

5.1 Windows® 98

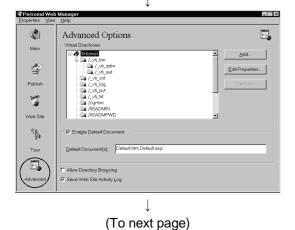
The following indicates how to set up the Web server. (Start)



(1) Set the CD-ROM included with the used server (personal computer) into the CD-ROM drive and execute C:\add-ons\pws\Setup.exe. If the above file is not found on the CD-ROM, the installer is stored in\Windows\Options\Cabs \Pws in the drive where Windows® 98 has been installed. (Screen shown on the left)

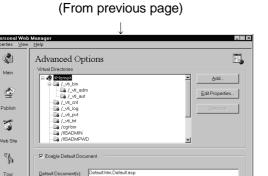


(2) Start the Web server (Personal Web Server 4.0).

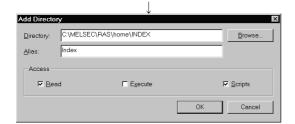


(3) As the screen on the left appears, click [Advanced].

5 - 1 5 - 1

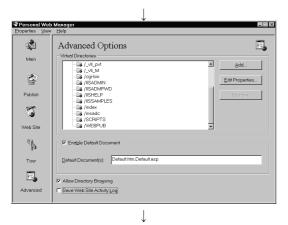


(4) Choose Home from the virtual list and click the [Add] button.

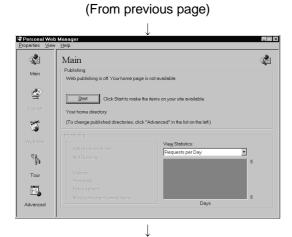


Save Web Site Activity Loc

- (5) As the Add Directory dialog box appears, make the following settings.
 - Directory: Specify "C:\MELSEC\RAS\home\index". (Specify a new folder when you changed the installation destination folder at the installation of GX RemoteService-I.)
 - 2) Alias: Enter "INDEX".
 - 3) Access: Enable "Read" and "Scripts".
- (6) An alias (INDEX) is added to the virtual directory. Click [Main] after confirming that the alias has been added.



(To next page)



(End)

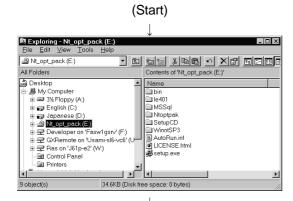
(7) Click the [Start] button in the "Publishing" list.

POINT

If you have added the alias with Web issue ON, stop Web issue once and click the [Start] button again to turn Web issue ON.

5.2 Windows NT® 4.0

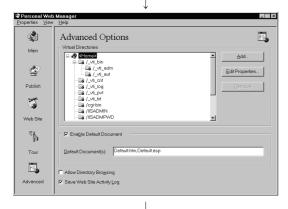
The following indicates how to set up the Web server.



 Set Option Pack into the CD-ROM drive and double-click setup.exe.
 Installation starts.



(2) Choose [Program] - [Windows NT 4.0 Option Pack]- [Microsoft Personal Web Server] - [Personal Web Manager].

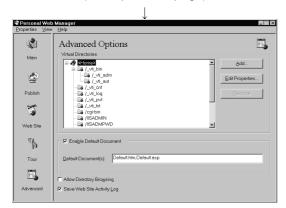


(3) As the screen on the left appears, click [Advanced].

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5 - 4 5 - 4

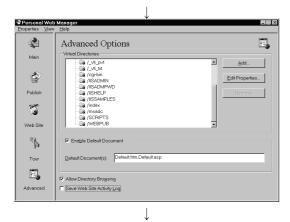




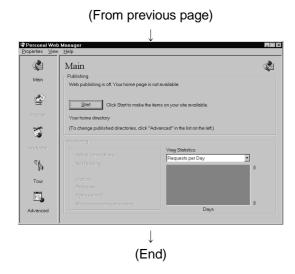
(4) Choose Home from the Virtual list and click the [Add] button.



- (5) As the Add Directory dialog box appears, make the following settings.
 - Directory: Specify "C:\MELSEC\RAS\home\index". (Specify a new folder when you changed the installation destination folder at the installation of GX RemoteService-I.)
 - 2) Alias: Enter "INDEX".
 - 3) Access: Enable "Read" and "Scripts".
- (6) An alias (INDEX) is added to the virtual directory. Click [Main] after confirming that the alias has been added.



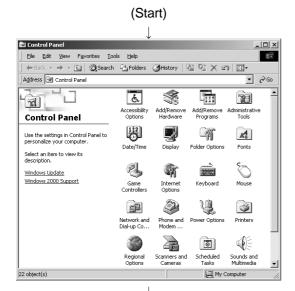
(To next page)



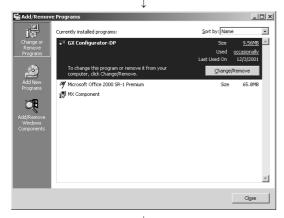
(7) Click the [Start] button in the "Publishing" list.

5.3 Windows® 2000

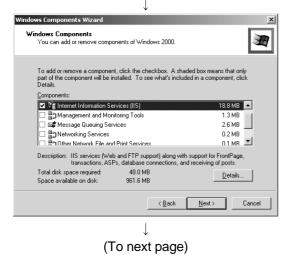
The following indicates how to set up the Web server.



(1) Set the CD-ROM included with the used server (personal computer) into the CD-ROM drive and open [Add/Remove Programs] from [Control panel].

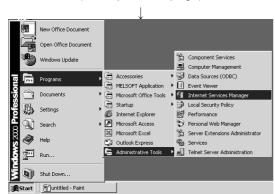


(2) Click Add/Remove Windows Components.



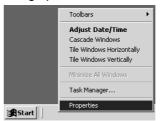
(3) Since the Windows Components Wizard screen starts, enable [Internet Information Service (IIS)] and click [Next]. (Installation starts. Installation ends when the completion screen appears.)

(From previous page)



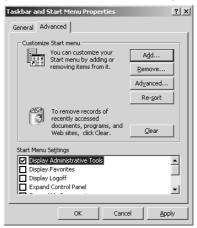
(4) Choose [Start] - [Programs] - [Administrative Tool] - [Internet Services Manager].

Since [Administrative Tool] in the Start menu is hidden by default on Windows® 2000, display it in the following operation method.



Right-click on the taskbar to display the above menu, and choose [Properties].

Enable "Display Administrative Tools" in the [Taskbar and Start Menu Properties].



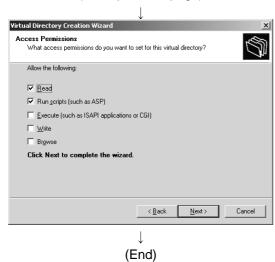
Internet Service Manager starts.

(5) On the screen shown on the left, choose [Default Web Site] and right-click to choose [New] - [Virtual Directory].



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(From previous page)



(6) Since Virtual Directory Creation Wizard starts, make the following settings.

Alias: Index

Directory: GX RemoteService-I installation destination directory

Set Access Permissions as shown on the left screen.

6. SETTING THE GX RemoteService-I FUNCTIONS

This chapter explains the function settings to be made on the server (personal computer).

You may make each setting as desired, but using the Wizard allows you to make settings easily.

Refer to Chapter 4 for the setting items and procedures.

Starting GX RemoteService-I displays the following screen.

Refer to Section 6.2 and Sections 6.3.1 to 6.3.8 for detailed explanation of the corresponding setting screens.



Select the automatic or manual operation mode and then click the [Setting wizard] button to display the Wizard screen.

Whether the setting items must be set or not in the automatic and manual operation modes is as indicated in the following table.

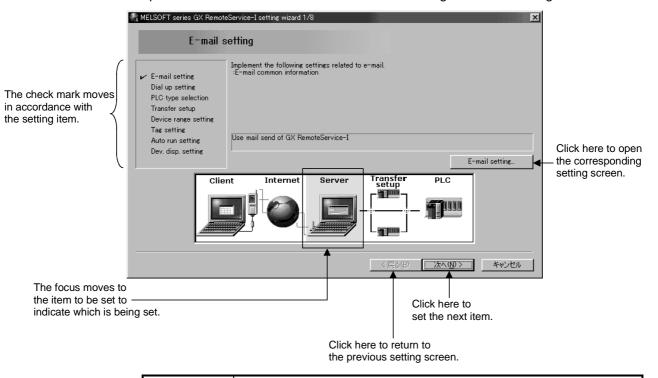
		manual operation mode	
Setting Item	automatic operation modes GX	When e-mail function of GX RemoteService-I is	such as Microsoft®
		used	Outlook Express is used
E-mail setting	0	0	_
Dial up setting	0	0	0
PLC type selection	0	0	0
Transfer setup	0	0	0
Device range setting	0	0	0
Tag setting	0	0	0
Auto run setting	0	_	_
Dev. disp. setting	0	0	0

O: Setting required

-: Setting not required

6.1 Setting Wizard

The following screen is displayed by clicking the [setting wizard] button on the operation mode selection screen. Follow the messages to make setting.

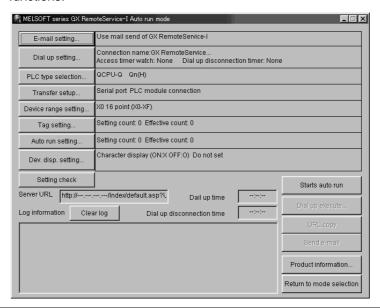


POINT

Refer to Section 6.3 for the explanation of detailed items to be set with the Setting Wizard.

6.2 Main Screen

This section explains the server URL, dialup execution, e-mail send and other functions.



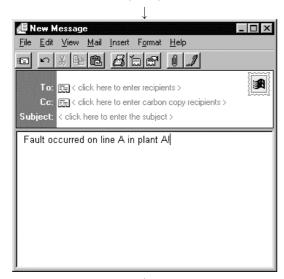
Item	Description	
Server URL	Shows the URL with the IP address.	
	Shows "" instead of the IP address if the IP address assigned by the Internet service	
	provider cannot be acquired.	
	This product cannot be used when the IP address is not displayed.	
Log information	Shows error definition in the automatic operation mode.	
	Shows the errors and operation of the personal computer.	
	Shows the time and date.	
	The log can be copied in the selected range.	
	• The log is up to 100 lines long. If it exceeds 100 lines, the older lines are deleted in due order.	
Clear log	Clears the message in log information.	
Dail up time	Shows the elapsed time after dialup execution.	
	The time is updated at intervals of five seconds.	
	":" appears if:	
	Dialup is not executed; or	
	Dialup is executed from other than GX RemoteService-I.	
	If the time has exceeded 9999:59:59 (9999 hours 59 minutes 59 seconds), it returns to 00:00:00.	
Dail up disconnection	Appears when the automatic line disconnection system is access time monitoring or dialup	
time	disconnection timer in the line disconnection setting. (":" appears if the setting is not made.)	
	Counts down to zero.	
	The time is updated at intervals of five seconds.	
	For access time monitoring, countdown starts from the preset time every time access is made.	
	The line is disconnected when the time is zeroed.	
Starts auto run	Always executes monitoring.	
	The button name changes to "stop auto run" during automatic operation, and clicking it	
	terminates the automatic operation.	

Item	Description
Dial up execute	Starts dialup connection with the preset connection name (this button is masked when the dialup connection name is not yet set).
URL copy	Copies the address displayed in the Server URL. When sent from the e-mail function of GX RemoteService-I, the address is added to the mail text automatically.
Send e-mail	Sends e-mail to the preset send destination.
Product information	Displays the version of the product.
Return to mode selection	Returns to the automatic operation mode/manual operation mode selection screen.

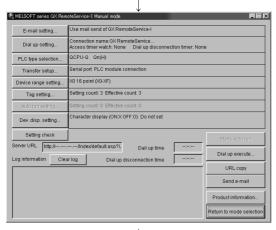
REMARK

The following gives a procedure for sending in the manual operation mode using the e-mail software such as Microsoft® Outlook Express.





(1) Start the mail software and create a mail text.



(2) Click the "URL copy" button on GX RemoteService-I.

http://000.000.000.000/index/default.asp

Fault occurred on line A in plant A!

 \downarrow

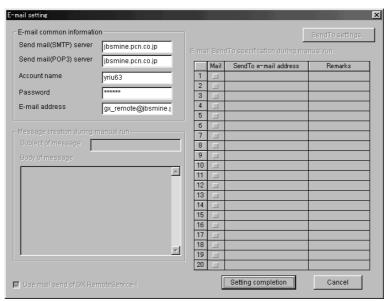
(3) Paste the URL copied from GX RemoteService-I to the created mail text.

6.3 Setting the Server (Personal Computer) Functions

6.3.1 E-mail setting

Set as required since the items to be set differ between the automatic and manual operation modes.

We recommend you to read "Description for Use" or like sent from the provider to make settings.

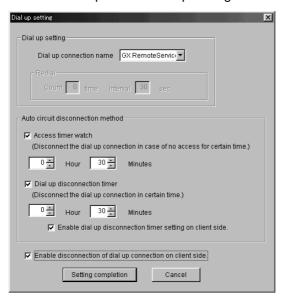


Item	Description	
Send mail (SMTP)	Specify the server to be used when sending e-mail from GX RemoteService-I.	
server	Set the address supplied by the provider.	
	Number of acceptable characters: 1 to 256 characters	
Send mail (POP3)	Enter the server to be used when receiving e-mail.	
server	Set the address supplied by the provider.	
	Number of acceptable characters: 1 to 256 characters	
Account name	Specify the account name for POP3 server authentication.	
	Set the account name supplied by the provider.	
	Number of acceptable characters: 1 to 255 characters	
Password	Specify the password of the account name for POP3 server authentication.	
	Set the password of the account name supplied by the provider.	
	Number of acceptable characters: 1 to 255 characters	
E-mail address	Specify the returning mail address.	
	You can set 1 to 255 characters.	
	Note: Though GX RemoteService-I does not have the function to receive e-mail, set this address	
	since it is needed when sending e-mail.	
Subject of message	Set the subject of e-mail.	
	Number of acceptable characters: 1 to 256 characters	
	Note: All the subject may not be displayed depending on the model used.	

Item	Description				
Body of message	Enter the text of e-mail. Number of acceptable characters: 0 to 256 characters				
		server is added to the character string sent actually, create a message in			
		umber of URL characters.			
	Description	ambor of orce originations.			
"SendTo setting"					
	You can set the send destination in the manual mode only.				
button	SendTo settings SendTo semail address Remarks Mail watch1 watch2 watch3 watch4 watch5 1 accepting on A on Mr. A watch4 watch5 watch4 watch5 watch4 watch5				
		1 ass@#**co.p A co. Mr. A 2 2 bbb@***co.p A co. Mr. B			
		4			
		7			
		8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			
		11			
		14 15			
		16			
		19			
		Copy Paste Delete All clear Setting completion Cancel			
	Item	Description			
	SendTo e-mail	Set the e-mail address of the personal computer.			
	address	Set it within the range 1 to 255 characters.			
	Remarks	Remarks Can be used to make a memo of a company name, person's name and like.			
	Enter them within 256 characters. Mail Can be set in the manual operation mode only.				
	Set whether e-mail will be sent or not.				
		In the automatic operation mode, the status set for automatic operation setting			
		appears.			
	watch 1 to watch 10				
		Set whether the system will be monitored or not in the automatic operation			
		detail setting.			
	"Copy" button	Used to copy the selected row.			
		To choose the row, click any of numbers 1 to 20.			
	"Dooto" butters	You cannot copy the row unless the whole row is selected.			
	"Paste" button "Delete" button	Used to paste the copied row. Used to delete the selected row.			
	Delete button	To choose the row, click any of numbers 1 to 20.			
		You cannot delete the row unless the whole row is selected.			
	"All clear" button	Used to delete all rows.			
	7 iii Gidai Battoff				
E-mail SendTo	Mail	· Solact whather a mail will be contact as			
	Mail : Select whether e-mail will be sent or not.				
specification during	Can be set in the manual operation mode only.				
manual run	SendTo e-mail address : Shows the e-mail send destination. Remarks : You can set the additional information on the e-mail send				
	destination.				
Use mail send of GX	Can be selected in the manual operation mode.				
RemoteService-I	Automatically set in the automatic operation mode.				

6.3.2 Dialup setting

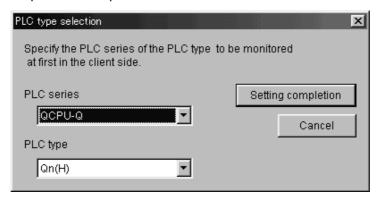




Item	Description		
Dial up connection	Select the connection name set in the dialup setting.		
name	The number of displayed characters is up to 16.		
Redial	Count: Set within 0 to 99.		
	Interval: Set within 0 to 999.		
Access timer watch	Disconnects the dialup connection if there is no access to the server (personal computer) for a		
	predetermined period of time.		
	Hour: Set within 0 to 99.		
	Minutes: within 0 to 59.		
	Note that you cannot set 0 hours 0 minutes.		
Dial up disconnection	Disconnects the dialup connection in a predetermined period of time.		
timer	Hour: Set within 0 to 99.		
	Minutes: within 0 to 59.		
	Note that you cannot set 0 hours 0 minutes.		
Enable dial up	Set whether or not the line disconnection timer can be set again from the personal computer.		
disconnection timer	Made valid only when the line disconnection timer has been selected.		
setting on client side			
Enable disconnection	Enables the dialup connection of the server (personal computer) to be made by the personal		
of dial up connection	computer.		
on client side	With the exception of the personal computer that has disconnected the line, the line is		
	disconnected without previous notice to disable communication with the server (personal		
	computer).		

6.3.3 PLC type setting

As the PLC type, set the PLC series and PLC type of the PLC to be accessed first from the personal computer.

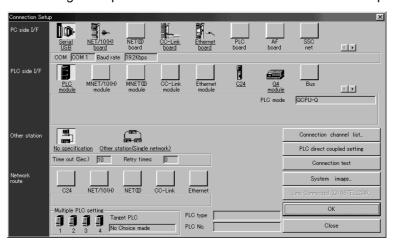


Item	Description		
PLC series PLC type	Set the items when selecting or changing the PLC Series and/or PLC type of the PLC to be accessed first from the personal computer.		
	PLC series	PLC type	Remark
	ACPU	AnN, AnA, AnS, AnSH	A0J2H, A1FX, A1S, A1SJ, A1SH, A1SJH, A1N, A2C, A2CJ, A2N(S1), A2S, A2SH, A3N, A2A(S1), A3A
		AnU, A2AS	A2U(S1), A2AS(S1), A2AS-S30, A2AS-S60, A3U, A4U
	QnACPU	_	Q2A, Q2AS(H), Q2AS1, Q2AS(H)S1, Q3A, Q4A, Q4AR
	QCPU-Q	Qn (H)	Q02(H), Q06H, Q12H, Q25H
		Q00J,Q00,Q01	Q00J, Q00, Q01
	QCPU-A	_	Q02(H)-A, Q06H-A
	SCPU	A171SH	A171SH
		A172SH	A172SH
	A173UH (S1) A173UH(S1)		A173UH(S1)
		A273UH (S3)	A273UH(S3)
	FXCPU	_	FX0(S), FX0N, FX1, FXU, FX2C, FX1S, FX1N, FX2N(C)

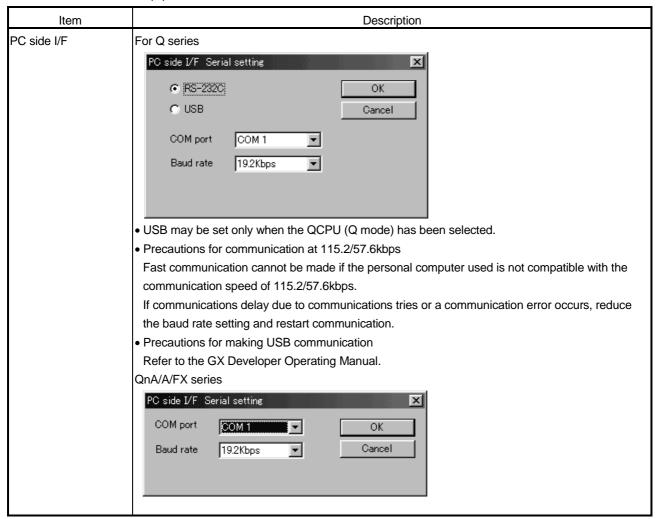
Item	Description	
PLC series	If you have chosen the PLC Series and/or PLC type other than the one currently set, the following	
PLC type	dialog box appears for confirmation.	
	MELSOFT series GX RemoteService-I	
	Return the Target connection specification and device to default values. Change PLC series and PLC type?	
	Yes No	
	Click the "Yes" button to change the following settings and indications.	
	 Changes the PLC type. Changes the connection setup to the PLC CPU direct-coupled path. 	
	Changes the device range setting to the default value.	
	Changes the tag setting to the default value.	
	Changes the automatic operation setting to the default value.	
	Clicking the "No" button does not change the settings.	

6.3.4 Connection setup

Set the connection setup between the server (personal computer) and PLC. This setting also specifies the PLC to be accessed first from the personal computer.



(1) Access to the host



Item	Description	
PC side I/F	The baud rate that can be selected depends on the PLC Series and PLC type.	
	Choose 9.6kbps for the A Series.	
	• For the QnA Series, the PLC CPU that can communicate at the 38.4kbps speed is the QnACPU	
	of unction version B or later. Refer to the GX Developer Operating Manual for the way to identify	
	the module version.	
	When using the A6TEL as a converter, refer to the GX Developer Operating Manual.	
PLC side I/F	Choose the PLC series of the PLC to be connected with GX RemoteService-I.	
	PLC side I/F Detailed setting of PLC module	
	PLC mode ACPU ▼ OK	
	Cancel	
	via A6TEL,Q6TEL(A mode) converter mode	
011 1 11		
Other station	No specification	
	Specify when the access target is in a multiple PLC system.	
	Other station (Single network)	
	It indicates a system which is configured by a single network and a multilevel system, e.g., only	
	MELSECNET/10 or only Ethernet. (Since Ethernet is regarded as the MELSECNET/10, specify	
	Single network for an MELSECNET/10 and Ethernet mixed system.)	
	If a time-out or other error occurs in communications with the PLC CPU, set a longer	
	communications time check period.	
	Until the error appears, during execution is displayed in Monitor status.	
	The longest time until the error appears can be found by the following expression.	
	(Time specified for communications time check) $ imes$ 3 $ imes$ (Count specified for the number of retries + 1)	
	For example, when the communications time check is specified as 30 seconds and the number of	
	retries as 0 times, the resultant time is (30 seconds) \times 3 \times (0 + 1) = 90 seconds, and the error	
	appears after a maximum of 90 seconds have elapsed.	
	Choose No specification when specifying the own station.	
	When power-off, hardware reset or the like of the PLC CPU is performed during ladder monitor, it	
	will take time until a communications error appears.	
Network route	Choose the network type, network No., station number and first I/O No. to be accessed.	
	The setting items depend on the network type that has been set.	
Multiple PLC Setting	Specify when the access target is in a multiple PLC system.	
Connection channel	You can set the connection target while looking at the Connection channel list.	
list	As clicking [OK] automatically sets the connection channel on the Connection Setup screen,	
	settings can be made easily if a complicated system is configured. Set the network number, station	
	number and others as desired according to the access target.	
	2 hours park Assess WEST (2000 and park rains to Graduals and Section 10 and park assessment to Graduals and Section 10	
	To a Gain June 1997 Annual Part of Control 1997 Annual Par	

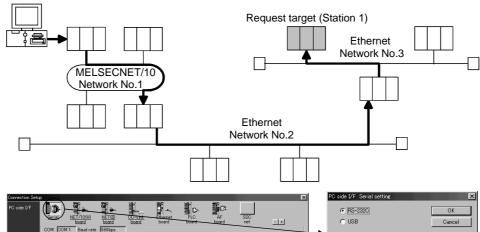
Item	Description		
Connection channel list	Clicking the [OK] button automatically sets the connection path (area enclosed by a circle) on the Connection setup screen. About display changing		
	Convenient use of display		
		and PLC side I/F and selecting the display selection	
	·	displays only the paths within the accessible rang	ges in the other station,
	1	ath and mixed network communication path.	
	A system configuration list	of different series can also be displayed.	
	Request Source	Server (Personal Computer) Connected PLC	Access Target
	Conver		Q Series
	Server	QCPU (Q mode)	QnA Series
	(personal computer)		A Series
	List mode Display all routes 18 AF board communication. Access MNET/10 other station 19 AF board communication. Access MNET/00 other station 19 AF board communication. Access MNET/00 other station 21 Serial port. Access 2019 AF access 10	OK Cancel	
PLC direct coupled setting	Useful for changing Other	station to Host.	
Connection test	Tests whether normal access can be made to the access target PLC CPU set on the Connection setup screen. When normal access can be made, the type of the access target PLC CPU appears in the CPU		
Overtone investor	type display field.	and the most mostly	
System image	Illustrates the set connection target path.		
Line connection	Cannot be set.		
(Q/A6TEL, C24)			

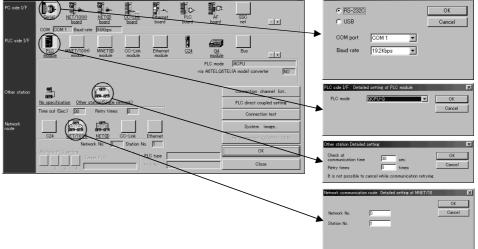


Screen setting for MELSECNET/10 and Ethernet combined system (Single network)

In an MELSECNET/10 and Ethernet mixed system configuration, specify Single network to access the other station. (Since Ethernet is equivalent to the MELSECNET/10)

An example of the Connection Setup setting screen is provided for the following system configuration (Q/QnA only).





For access to the other station or multilevel system, not only the Connection Setup but also the routing parameters should be set to enable communications.

POINT

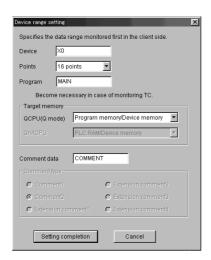
When connecting the PLC to be accessed to the server (personal computer) via Ethernet, CC-Link or serial communication, refer to GX Developer Operating Manual.

6.3.5 Device range setting

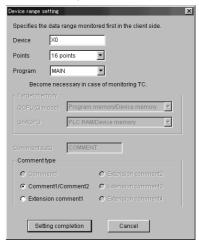
This section explains the name, points and others of the device to be read first from the PLC CPU.

Screen examples

When Qn(H)CPU is selected



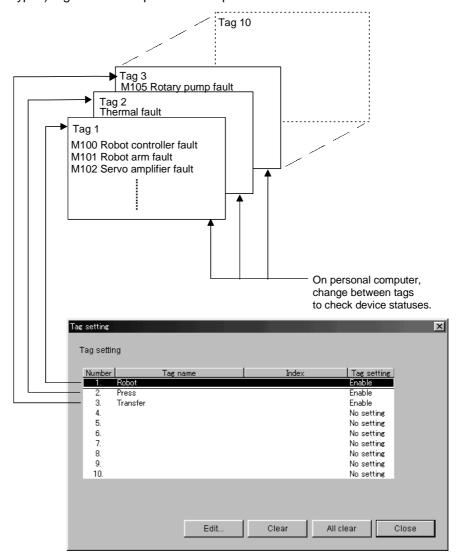
When ACPU is selected (AnU, AnUS, AnUSHCPU)

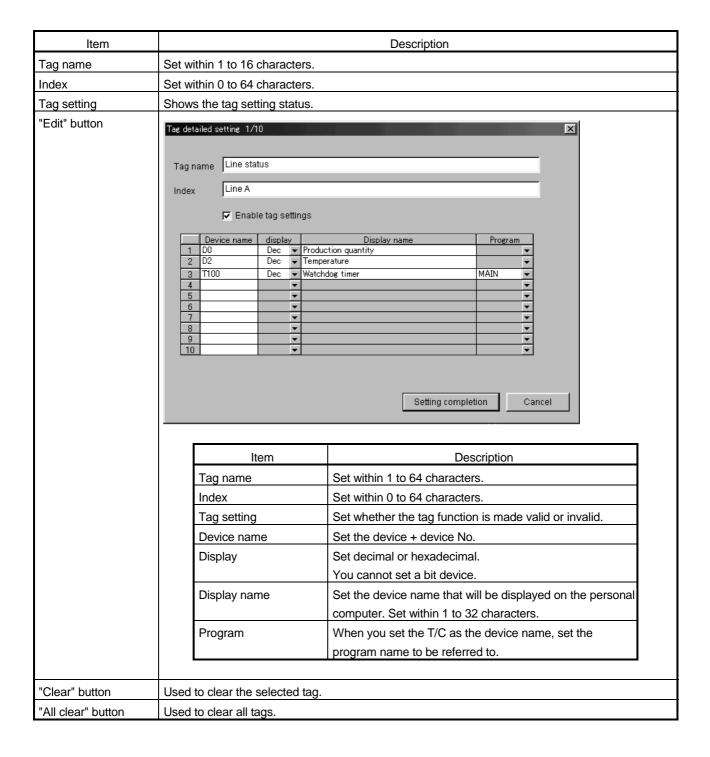


Item	Description			
Device	Set the device + device No.			
Points	Set any of 1, 16, 32, 64, 128 and 256 points	S.		
Program	Set the program name when monitoring the	T/C.		
Target memory	` `	When you have set the Qn(H)CPU or QnACPU, make selection from the following memories. You cannot make setting when the set PLC Series is other than the Qn(H)CPU or QnACPU.		
	Qn(H)CPU	QnACPU		
	Program memory/Device memory	PLC RAM/Device memory		
	Memory card (RAM)	IC Card A (RAM)		
	Memory card (ROM)	IC Card A (ROM)		
	Standard RAM	IC Card B (RAM)		
	Standard ROM IC Card B (ROM)			
Comment data	Set the comment data name to be displayed or searched for by the personal computer.			
	Fixed to "COMMENT" when the set PLC Series is other than the Qn(H)CPU or QnACPU.			
Comment type	Set the comment data name to be displayed or searched for by the personal computer.			
	You need not make setting when the Qn(H)	You need not make setting when the Qn(H)CPU or QnACPU has been set as the PLC Series.		

6.3.6 Tag setting

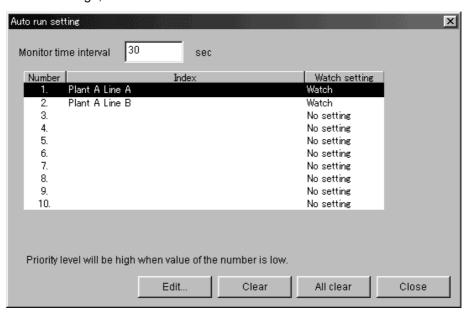
Setting tags allows you to display different devices you want to read (up to 10 device types) together on the personal computer.

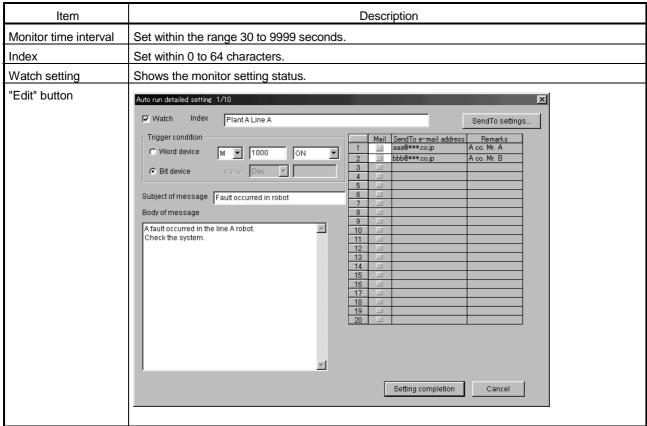




6.3.7 Automatic operation setting

When performing automatic operation, set an e-mail sending trigger condition, an e-mail message, etc.





Item	Description			
"Edit" button				
	Item	Description		
	Watch	Set whether monitoring will be performed or not.		
	Index	Set within 1 to 64 characters.		
	Trigger condition		on for bit or word device.	
		present value of D33	condition enabled examples when the is 100.	
		Display	Description	
		=	Condition is enabled when the value is equal to 100.	
		<	Condition is enabled when the value is less than 99.	
		>	Condition is enabled when the value is more than 101.	
		<=	Condition is enabled when the value is not more than 100.	
		>=	Condition is enabled when the value is not less than 100.	
		<>	Condition is enabled when the value is other than 100.	
	Subject of message	Refer to Section 6.3.1	l.	
	Body of message "SendTo setting" button			
		•		
"Clear" button	Used to delete the selected	Used to delete the selected continuous monitoring setting.		
"All clear" button	Used to delete all continuous	Used to delete all continuous monitoring settings.		

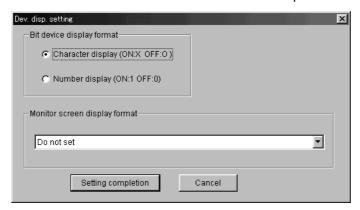
POINT

- If the device set for the trigger condition has already met its condition before a start of automatic operation, e-mail is sent immediately after automatic operation is started.
- E-mail is sent when the status of the device set for the trigger condition turns from OFF to ON.

Note that once e-mail is sent, next e-mail will not be sent until the device status changes from ON to OFF to ON.

6.3.8 Device display format setting

Set the formats in which the devices read on the personal computer will be displayed.



Item	Description
Bit device display	Choose the bit device display format.
format	
Monitor screen display	Choose the combination of the character color and background color.
format	

7. ABOUT THE PERSONAL COMPUTER

This chapter explains the setting items and display methods on the personal computer.

7.1 List of Personal Computer Setting Items

Making access to the address added to e-mail displays the following screen.

α	ig access to the address added to a man displays the folic
1) -	(Return to target connection specification Implement server side circuit setting > 2)
1)	Serial port Access serial communication other station via serial communication module
	Serial port Access serial communication other station via serial communication module
	Serial Communications
	The state of the s
2) -	
3) ⁴	
	Serial Communications Link
	•
	(50.44.7/5
	PC side I/F
	Serial I/F setting
	COM port
4)≺	COM1 ▼
	Baud rate
	9.6Kbps ▼
	15.5Kbps
	4 DL 0 - 11- 1/E
	PLC side I/F
	Detailed setting of C24
	Station No.
5) -	Parity
٥)	COdd
	CEven
	© None
	Course
٠.	Other station
6) -	Check at communication time(sec) 30
	Retry times 0
	Network route
	Detailed setting of Computer link
7)	Head I/O
٠,	
	Station No.
	Module specification
	01
8) -	02
,	_
	03
	C4
	Display format
	© Word (Dec)
	C Word (Hex)
0/	
9) -	C Bit
	C Comment Dec
	C Comment Hex
	C Comment Bin
	Device range
10)	Device X0
,	> -
11) -	Bit device is 16 point units
,	Points 16 🔽
	Point1 is possible to select only in word device.
	Program name MAIN
12) -	Set only in case of TC monitor
,	
13) -	Target memory
	Program memory/Device memory 💌
14) -	Comment data name COMMENT
	Device comment search
16)	Start
17)	Tag monitor

7

7 - 1 7 - 1

No. Description 1) Set the PLC series, PC side I/F, PLC side I/F and other station. 2) Set the time when the line is disconnected from the personal computer. 3) Shows the connection form between the server (personal computer) and PLC. 4) Set the details of the port or board used by the server (personal computer). Set the details of the module used on the PLC side. 5) (The screen on the left is an example of a serial communication screen.) Set within the range 1 to 9999. 6) Set within the range 0 to 5. Set the head I/O No., station number and network No. of the module. 7) The setting items change depending on the module selected for the PLC side I/F. 8) Specify the PLC No. to be accessed when a multi PLC system is configured. 9) Choose the display format on the personal computer. 10) Set the device to be read and its number of points. 11) Choose the number of read points of the device to be diagnosed. 12) Choose the program to be diagnosed. Choose the memory to be accessed. 13) 14) Choose the comment data to be diagnosed. 15) Set the keyword for device comment search. (Within 32 characters) Execution makes access to the PLC. 16) 17) Choose when monitoring the tag.

7.2 Providing Tag Display

This section explains the tag display screen.

6	Production A fau			
1) {	Production number	0	D0	
	Various statuses	0	D1	
	Manual operation flag	0	M1	
	Watch timer(Contact)	0	TO	
	Watch timer(Coil)	0	T0	
	Watch timer(Setting value)	Ī	T0	
	Watch timer(Current value)	0	T0	



3) { | Start |

4) { Device monitor

Item	Description				
1)	When TC is displayed, (Contact), (Coil), (Set value) or (Present value) is added to its display name.				
2)	Select the tag you want to display from the tag list.				
	Monitors a list of devices chosen by tag selection.				
3)	Note that the statuses of the devices read to the personal computer are those when start is clicked.				
	Note: The read devices do not vary in real time.				
4)	Moves to the device monitor page.				

7.3 Monitoring the Devices

This section explains the device display formats.

The following gives the examples of the Web browser and personal computer displays provided when the remote device monitor function is used.

(a) Word multi-point decimal

CPU:Q02(H) D0-D15

Device	+0	+1	+2	+3	+4	+5	+6	+7
DO	0	0	0	0	0	0	0	0
D8	0	0	0	0	0	0	0	0

(b) Word multi-point hexadecimal

CPU:Q02(H)

D0-D15

Device	+0	+1	+2	+3	+4	+5	+6	+7
DO	0000	0000	0000	0000	0000	0000	0000	0000
D8	0000	0000	0000	0000	0000	0000	0000	0000

(c) Bit multi-point

CPU:Q02(H)

X0-XF

Device	FEDC	BA98	7654	3210
X0	0000	0000	0000	0000

(d) Commented decimal

CPU:Q02(H) D0-D15

Device	Current value	Comment
D0	0	A line production conditions
D1	0	B line production conditions
D2	0	C line production conditions
D3	0	D line production conditions
D4	0	
D5	0	
D6	0	
D7	0	
D8	0	
D9	0	
D10	0	
D11	0	
D12	0	
D13	0	
D14	0	
D15	0	

(e) Commented hexadecimal

CPU:Q02(H) D0-D15

Device	Current value	Comment
D0	0000	A line production conditions
D1	0000	B line production conditions
D2	0000	C line production conditions
D3	0000	D line production conditions
D4	0000	
D5	0000	
D6	0000	
D7	0000	
D8	0000	
D9	0000	
D10	0000	
D11	0000	
D12	0000	
D13	0000	
D14	0000	
D15	0000	

(f) Commented binary

CPU:Q02(H) D0-D15

Device FEDC BA98 3210 Comment 0000 A line production conditions 0000 B line production conditions DO D1 0000 C line production conditions D3 0000 D line production conditions D4 D6 nnnn D8 D9 D10 D11 D13 nnnn D14

7 - 5 7 - 5

7.4 Setting the Server (Personal Computer) Line Connection

This section explains the server (personal computer) side line disconnection timer setting and line disconnection on the personal computer.

Server Side Circuit Settings
Time to disconnect the circuit 00:06:32

Time to disconnect the circuit
Time (0-99)
Minutes (0-59)
OK

Return to target connection specification

Server side dialup disconnect execution

It cannot connect if server side dial up diconnect is executed. Please make sure before executing it.

Item	Description
Server Side Circuit	Set the time until the line is disconnected.
Settings Time to	When making this setting, preset "Enable disconnection of dial up connection on client side" on the
disconnect the circuit	dialup setting screen.
Server side dialup	Disconnects the dialup connection.
disconnect execution	

8. GETTING STARTED WITH GX RemoteService-I!

This chapter describes the setting of GX RemoteService-I functions on the server (personal computer) under the conditions presented in Section 8.1 and the confirmation of tag displays and device displays on the personal computer.

Section 8.1 explains the setting of GX RemoteService-I.

Section 8.2 explains the varying of the monitor devices and the arrival of e-mail.

Section 8.3 explains the operation procedure of looking at the server (personal computer) after the arrival of e-mail.

8.1 Setting GX RemoteService-I to the Server (Personal Computer)

Outline of setting example

(1) Setting of e-mail sending conditions

When the trigger condition is enabled, make settings to send e-mail to two persons.

- When M1000 turns on, Mr. A is informed of a "robot" fault.
- When M1001 turns on, Mr. B is informed of a "press" fault.
- (2) Setting of devices read by the personal computer
 - Make tag settings (three tags) for confirming the system status.
 - Make setting to read the annunciator (F) first for checking the fault status of the system.

Conditions

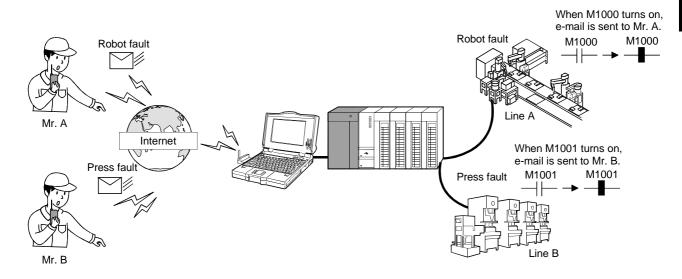
	Setting item	Setting		
Operating mode)	Automatic operation mode		
	Send mail (SMTP) server			
E-mail setting	Send mail (POP3) server Account name Password	Refer to "Description for Use" or like sent from the provider and make settings.		
	E-mail address			
Dial up connecti	on name	GX Remoteservice-I		
PLC type		QCPU (Q mode), Qn (H)CPU		
Transfer setup		PLC direct connection		
		F0		
	Device	Note: Set the F0 comment on GX Developer and write it to the PLC CPU in advance.		
Device range	Points	16 points		
setting	Program	MAIN		
	Target memory	Program memory/device memory		
	Comment data	COMMENT		

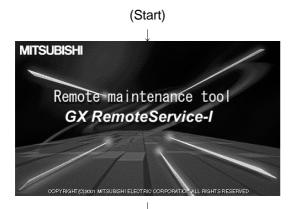
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8

						(From previous page)	
Setting item		Setting					
Tag setting			Tag name	Device name	Display format	Display name	
			Robot	M100	_	Robot controller fault	
			(Tag 1)	M101	_	Robot arm fault	
				M102	_	Servo amplifier fault	
			Press	X100	_	Thermal fault	
			(Tag 2)	D100	Decimal	Coolant pressure low	
			X130	_	Die fault		
		Transfer	M105	_	Rotary pump fault		
		(Tag 3)	X150	_	Stocker cylinder fault		
			D110	Decimal	Transfer motor speed		
		Index	Plant A Line A				
Auto run setting		Trigger condition	M1000 turns on				
		Subject of message	Fault occurred in robot.				
	1	Body of message	A fault occurred in the line A robot.				
			Check the system.				
		SendTo e-mail	Mr. A aaa@***.co.jp				
		address					
Autorum setting		Index	Plant A Line B				
		Trigger condition	M1001 turns on				
		Subject of message	Fault occurred in press				
	2	Body of message	A fault occurred in the line B press.				
			Check the system.				
		SendTo e-mail	Mr. B bbb@***.ne.jp				
		address					
Dev. disp. setting		Character display (ON: × OFF: O)					

Conceptual diagram of system

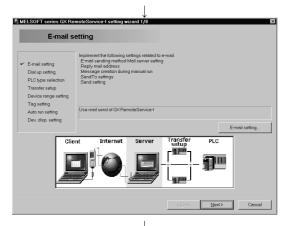




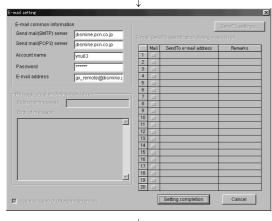
(1) Start GX RemoteService-I.



(2) Choose the automatic operation mode and click [setting wizard].



(3) Set e-mail to notify the personal computer. Click [E-mail setting].



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(4) Set the e-mail common information.

Set the following data of the provider with whom you have contracted.

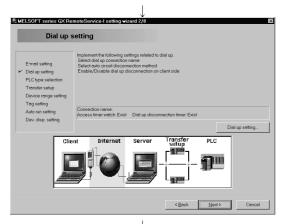
- Send mail (STMP) server
- Account name
- Send mail (POP3) server
- Password
- E-mail address

After the setting is finished, click [Setting completion].

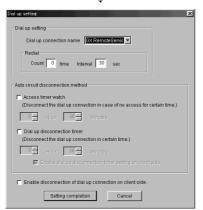
Remark

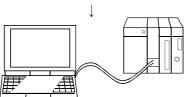
For the settings, refer to "Description for Use" or like sent from the provider.

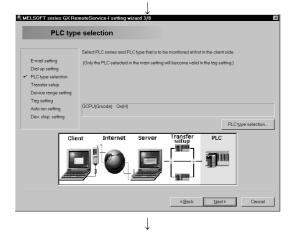




(5) Set the dialup connection name to be connected to the provider.Click [Dial up setting].

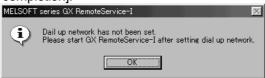






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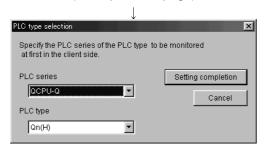
(6) Set the dialup connection name. After the setting is finished, click [Setting completion].



Always make the dialup setting of Windows®. If it has not been made, the following screen appears and the dialup setting screen of this product cannot be opened.

- (7) Connect the server (personal computer) and PLC.Prepare a program that can turn on M1000 and M1001 beforehand for the PLC.
- (8) Set the PLC series and PLC type of the PLC CPU to be accessed first by the personal computer. Click [PLC type selection].

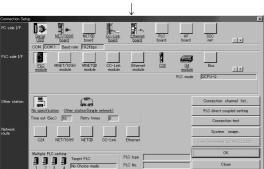




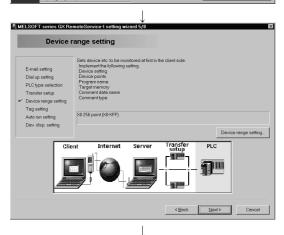
(9) Choose the PLC series and PLC type of the PLC CPU to be connected to the server (personal computer). After the setting is finished, click [Setting completion].



(10) Set the connection path from the server (personal computer) to the PLC CPU. Click [Transfer setup].



(11) Set the path for connection of the server (personal computer) and PLC CPU. After the setting is finished, click [Connection test] to start a communication test. When normal communication is made, the CPU type appears in the CPU Type display field. After the setting is finished, click [OK].



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(12) Set the device, number of points, and program name to be read first when the PLC CPU is accessed by the personal computer. Click [Device range setting].



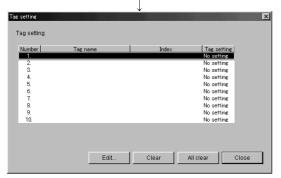


(13) Set the device name (F0), number of points (16 points), and program name (MAIN).
Refer to Section 6.3.5 for detailed explanation of the target memory and comment.
After the setting is finished, click [Setting completion].



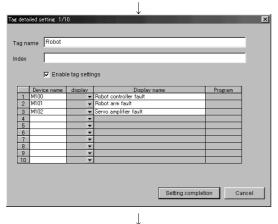
(14) Make setting to read different types of devices (up to 10 types) together to the personal computer.

Click [Tab setting].



(15) Choose No. 1 and click [Edit].

Out of the three tags to be set, Tag 1 will only be explained here.

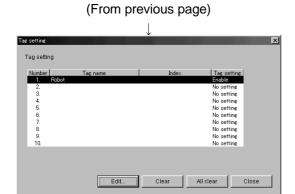


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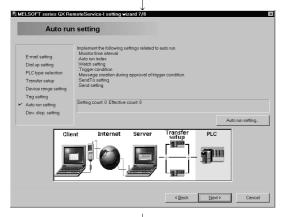
(16) Set the tag name, device names and display names.

After the setting is finished, click [Setting completion].

(Set Tag 2 and Tag 3 in the same procedure.)



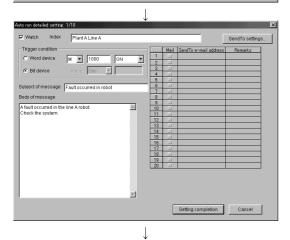
(17) When editing Tag 2 or Tag 3, move the cursor to No. 2 or 3 and click [Edit]. To end, click [Close].



(18) Make setting to monitor the system automatically.Click [Auto run setting].

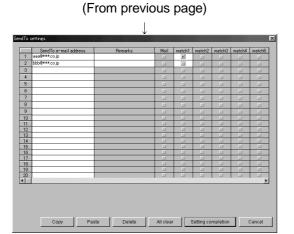


(19) Choose No. 1 and click [Edit].

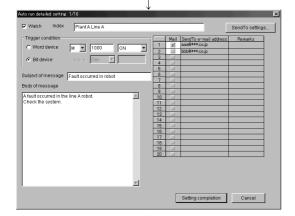


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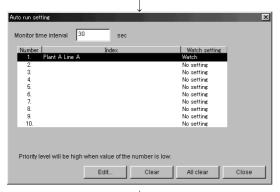
(20) Set the Watch, Index, Trigger condition (M1000), Subject of message, Body of message. Click [SendTo settings].



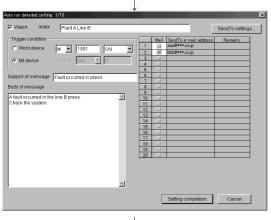
(21) Set the SendTo e-mail address. Setting Mr.A at watch 1. After the setting is finished, click [Setting completion].



(22) Click [Setting completion].



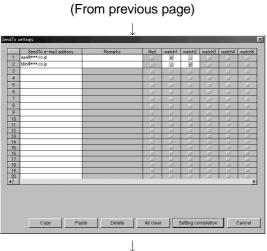
(23) Move the cursor to No. 2 and click [Edit].



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(24) Set the Watch, Index, Trigger condition (M1001), Subject of message, Body of message.

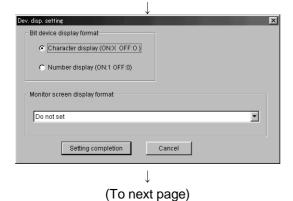
Enable 2 under "Mail". Click [SendTo settings].



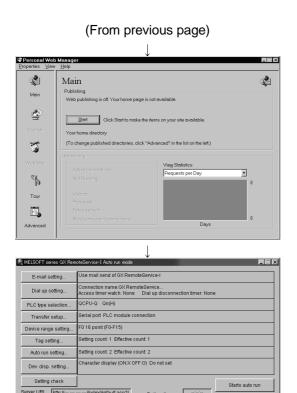
(25) You can check the combinations for sending email on the left screen.
When the check is finished, click [Setting completion].



(26) Set the display format of the screen to be displayed on the personal computer. Click [Dev. disp. setting].



(27) Choose "Character display (ON: \times OFF: \bigcirc)" and click [Setting completion].



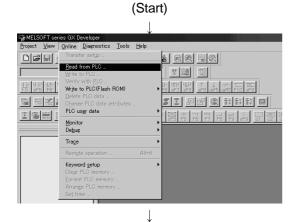
↓ (End) (28) Start the Web server software and click [Start]. Refer to Chapter 5 for starting the Web server software.

(29) Click [Start auto run].

8.2 Varying of Monitor Devices and Arrival of E-mail

Using the device test function of GX Developer, vary the monitor devices set on GX RemoteService-I and make sure that e-mail arrives.

Preinstall GX Developer into the server (personal computer).



(1) Start GX Developer installed in the server (personal computer).

Read the PLC program from [Online] - [Read from PLC].

For program reading operation, refer to the GX Developer Operating Manual.



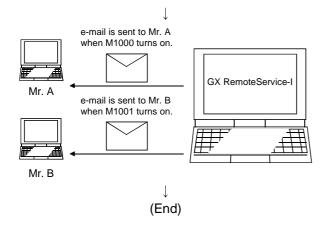
(2) After stating program monitoring from GX Developer, choose [Online] - [Debug] - [Device test] and set M1000 for "ON" and M1001 for "ON" on the left screen.

When M1000 is turned "ON", e-mail is sent to Mr. A.

When M1001 is turned "ON", e-mail is sent to Mr. B.

For GX Developer operation, refer to the GX Developer Operating Manual.

(3) E-mail is sent from GX RemoteService-I and notifies the personal computers.



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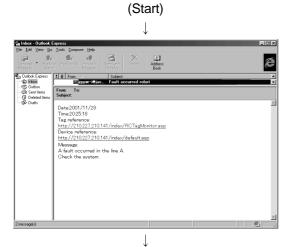
8.3 Receiving E-mail and Looking at Devices on Personal Computer

This section explains how to perform operation to check the e-mail sent from GX RemoteService-I and check the tag and device displays.

8.3.1 Until looking at tag

Outline of operation

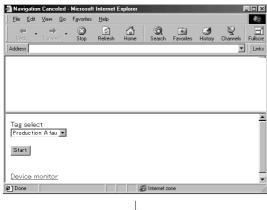
The following operation example explains how to choose Tag 2 (press) and check the operating status of the system after receipt of e-mail.



(1) The e-mail sent from GX RemoteService-I is received.

Check the received e-mail.

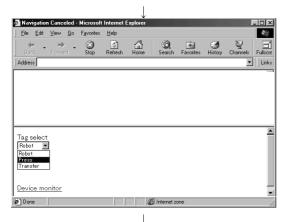
After confirming the message, click the URL of "Tag reference".



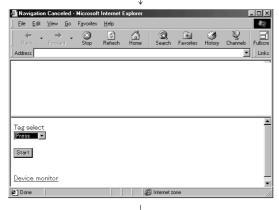
(To next page)

(2) The left screen appears. Choose [Tag select].

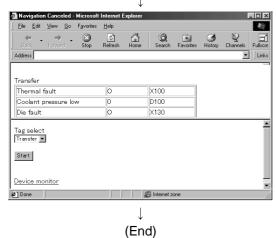




(3) As a list of tag names appears, choose "Press".



(4) Choose [Start].

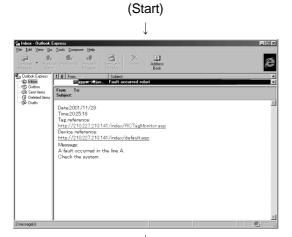


(5) The devices set for the press are read.

8.3.2 Until looking at devices

Outline of operation

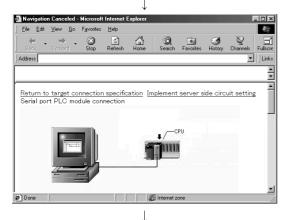
Following the operation in Section 8.3.1, monitor the device (F) using "Device reference" to check the details of the faulty status. The following operation example explains how to change the monitored device to the data register (D).



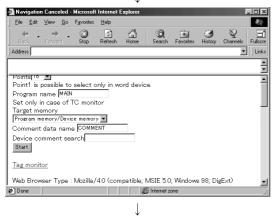
(1) The e-mail sent from GX RemoteService-I is received.

Check the received e-mail.

After confirming the message, click the URL of "Device reference".



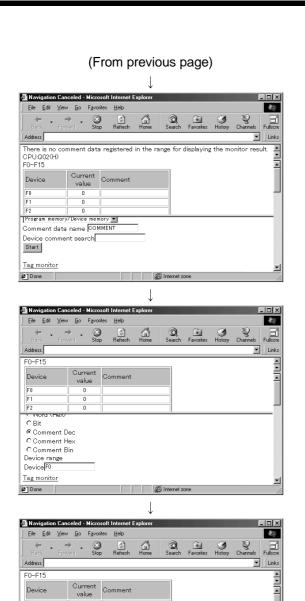
(2) Scroll the screen down.



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(3) Choose [Start].

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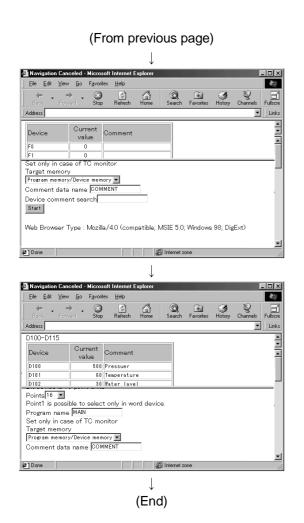


(To next page)

(4) 16 points, starting from F0, in the MAIN program where the device range has been set on the server (personal computer) are read.

(5) After confirming the contents of F0, change the device data to D100.

(6) Change F0 to D100.



(7) Choose [Start].

(8) The D100 value can be read.

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9. TROUBLESHOOTING

The following is the troubleshooting of the server (personal computer).

Phenomenon	Check	Corrective Action
Connection cannot be made from the dialup network to the provider.	Check that the dialup network has been installed.	Make sure that the dialup network exists in the Control Panel.
	Check that "Dial up connection name" of the dial up network has been set.	Make sure that the connection target has been registered within the dialup network in the Control
	Check that the modem driver has been installed.	Panel. Make sure that the modem used for the modem properties in the Control Panel is displayed.
	The modem does not dial.	Check by clicking the icon of the connection target within the dialup network in the Control Panel.
	The modem dials but connection cannot be made to the host. The line was connected but you cannot	Check by clicking the icon of the connection target within the dialup network in the Control Panel. Check by clicking the icon of the connection target
	log in.	within the dialup network in the Control Panel.
Dialup connection is instable. (Connection cannot be made sometimes.)	Connection is made from a place of weak radio wave with a mobile, or a local line is used.	For dialup connection, enter ", (pause)" before the phone number.
e-mail cannot be sent from GX RemoteService-I.	Check that the e-mail of GX RemoteService-I has been set.	Make sure that correct values have been set to the e-mail of GX RemoteService-I.
	 Check that mail can be set to the specified destination from commercially available e-mail. Check that the software can send mail. 	Check the settings for error. Contact the provider for confirmation.
	Check that the SMTP and POP3 server settings are correct.	 Check that the set character string is correct (e.g. periods, colons). Check the SMTP and POP3 server settings presented by the provider.
	Check that the account name and password have been set.	Confirm the account name and password presented by the provider.

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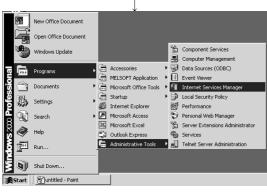
The following is the troubleshooting of the personal computer.

I ne following is the troubleshooting of the personal computer.				
Phenomenon	Check	Corrective Action		
	Check that device comments are written to the PLC CPU.	Using GX Developer, check that device comments have been written.		
Error appears in commented monitor.	Check that the device comments are correct.	Display the device setting screen of the server (personal computer) and check the registered device comment names.		
Error appears in T/C device monitor.	Check that the program name is correct.	Display the device setting screen of the server (personal computer) and check the registered program name.		
Tag names cannot be displayed.	Check that tag setting has been made to the server (personal computer).	Display the tag setting screen of the server (personal computer) and make sure that the tag names have been registered and the setting is valid.		
The line cannot be disconnected.	Check that disconnection from the personal computer is enabled on the server (personal computer).	Display the dialup setting screen of the server (personal computer) and make sure that "Server Side Circuit Settings Time to disconnect the circuit" has been turned on.		
The dialup disconnection timer cannot be set.	Check that dialup disconnection timer setting from the personal computer is enabled on the server (personal computer).	Display the dialup setting screen of the server (personal computer) and make sure that "Server Side Circuit Settings Time to disconnect the circuit" has been turned on.		
When devices or comments are displayed, a time-out occurs frequently and they cannot be displayed on the browser.	Check the script time-out period on the server (personal computer).	Change the script time-out period. Refer to REMARKS for the changing method.		
Communication cannot be made with the PLC. 01802001 01802002 01802005 010*4030 010*4031 010*4032	An unusable device name or range is used.	Check the device name and range in the PLC CPU manual.		
	Error appears in T/C device monitor. Tag names cannot be displayed. The line cannot be disconnected. The dialup disconnection timer cannot be set. When devices or comments are displayed, a time-out occurs frequently and they cannot be displayed on the browser. Communication cannot be made with the PLC. 01802001 01802002 01802005 010*4030 010*4031	Error appears in commented monitor. Error appears in T/C device monitor. Error appears in T/C device monitor. Tag names cannot be displayed. Check that the program name is correct. Check that tag setting has been made to the server (personal computer). Check that disconnection from the personal computer is enabled on the server (personal computer). Check that dialup disconnection from the personal computer is enabled on the server (personal computer). Check that dialup disconnection from the personal computer is enabled on the server (personal computer). Check that dialup disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that dialup disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that dialup disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that dialup disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that dialup disconnection timer setting from the personal computer is enabled on the server (personal computer). Check that the program name is correct.		

REMARK

The following is the way to change the script time-out period.





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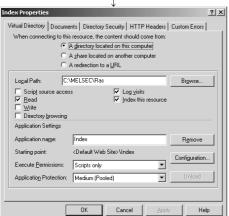
(1) Start Internet Information Service.

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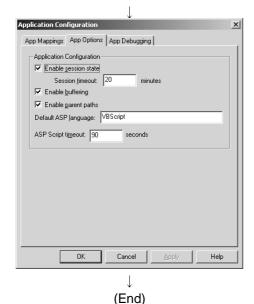




(2) Right-click the virtual directory "index" of GX RemoteService-I.



(3) Click the "Configuration" button in the <Virtual Directory> tab.



(4) Choose the <App Options> tab and change the time-out period of the ASP script to about 200 seconds.

APPENDICES

APPENDIX 1 RESTRICTIONS

The following table indicates the restrictions on use of GX RemoteService-I.

Item	Restrictions	
Monitor	The monitor display or like (inquiry to the personal computer) is slow or the monitor display results in a time-out.	
Setting check	Checks on set values, such as device names and ranges, are made by the server (personal computer).	
Line connection	The URL of the server (personal computer) must be mailed to the personal computer every time the server (personal computer) dials up.	
	The IP address assigned by the provider that the server (personal computer) dials up must be the global IP address.	
	The number of personal computers connectable to PWS simultaneously is up to 10. If there are more than 10, HTTP error 403 is displayed on the browser.	
	When connection is made from the browser designed for the server (personal computer), PWS counts the number of connected personal computers as 2.	
	A response from the server (personal computer) may be slow depending on the line conditions and like of the provider and between the relayed Internet servers.	

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MEMO

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GX RemoteService-I Version 1

Operating Manual

MODEL	SW1D5-RAS-O-E
MODEL CODE	13JU23
SH(NA)-080204-A(0112)MEE	



HEAD OFFICE : 1-8-12, OFFICE TOWER Z 14F HARUMI CHUO-KU 104-6212,JAPAN NAGOYA WORKS : 1-14 , YADA-MINAMI 5 , HIGASHI-KU, NAGOYA , JAPAN

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