



Engineering Software

MI Configurator Operating Manual

-SW1DNN-MICONF-M



SAFETY PRECAUTIONS

(Read these precautions before using this product.)

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

The precautions given in this manual are concerned with this product only. For the safety precautions for a MELIPC, refer to MELIPC MI5000 Series User's Manual (Startup).

In this manual, the safety precautions are classified into two levels: " WARNING" and " CAUTION".

MARNING

Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.



Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Under some circumstances, failure to observe the precautions given under "ACAUTION" may lead to serious consequences.

Observe the precautions of both levels because they are important for personal and system safety.

Make sure that the end users read this manual and then keep the manual in a safe place for future reference.

[Design Precautions]

! WARNING

- When performing the following operations, configure the system to ensure that the entire system will always operate safely.
 - (1) Setting up a development environment (personal computer) for the MELIPC, or changing data in the VxWorks part of the running MELIPC from the Windows part of a MELIPC
 - (2) Changing the operating status
 - (3) Operating the MELIPC from a development environment (personal computer) or the Windows part of the MELIPC

Especially in the above mentioned control operations that are performed from an external device to a remote MELIPC, any problems on the MELIPC side may not be dealt with promptly due to abnormal data communication. Determine corrective actions to be taken between the external device and the MELIPC in case of a communication failure.

[Security Precautions]

WARNING

To maintain the security (confidentiality, integrity, and availability) of the product and the system against unauthorized access, denial-of-service (DoS) attacks, computer viruses, and other cyberattacks from external devices via the network, take appropriate measures such as firewalls, virtual private networks (VPNs), and antivirus solutions.

[Startup and Maintenance Precautions]

ACAUTION

- When performing the following operations, configure the system to ensure that the entire system will always operate safely.
 - (1) Setting up a development environment (personal computer) for the MELIPC, or changing data in the VxWorks part of the running MELIPC from the Windows part of a MELIPC
 - (2) Changing the operating status
 - (3) Operating the MELIPC from a development environment (personal computer) or the Windows part of the MELIPC
 - Especially in the above mentioned control operations that are performed from an external device to a remote MELIPC, any problems on the MELIPC side may not be dealt with promptly due to abnormal data communication. Determine corrective actions to be taken between the external device and the MELIPC in case of a communication failure.
- Before performing online operations (especially, data change, forced output, and operation status change) for the running MELIPC from an external device connected, read the relevant manuals carefully and ensure the safety. Improper operation may damage machines or cause accidents.

CONDITIONS OF USE FOR THE PRODUCT

- (1) Mitsubishi Electric industrial PC ("the PRODUCT") shall be used in conditions;
 - i) where any problem, fault or failure occurring in the PRODUCT, if any, shall not lead to any major or serious accident; and
 - ii) where the backup and fail-safe function are systematically or automatically provided outside of the PRODUCT for the case of any problem, fault or failure occurring in the PRODUCT.
- (2) The PRODUCT has been designed and manufactured for the purpose of being used in general industries.

 MITSUBISHI ELECTRIC SHALL HAVE NO RESPONSIBILITY OR LIABILITY (INCLUDING, BUT NOT LIMITED TO ANY AND ALL RESPONSIBILITY OR LIABILITY BASED ON CONTRACT, WARRANTY, TORT, PRODUCT LIABILITY) FOR ANY INJURY OR DEATH TO PERSONS OR LOSS OR DAMAGE TO PROPERTY CAUSED BY the PRODUCT THAT ARE OPERATED OR USED IN APPLICATION NOT INTENDED OR EXCLUDED BY INSTRUCTIONS, PRECAUTIONS, OR WARNING CONTAINED IN MITSUBISHI ELECTRIC USER'S, INSTRUCTION AND/OR SAFETY MANUALS, TECHNICAL BULLETINS AND GUIDELINES FOR the PRODUCT. ("Prohibited Application")

Prohibited Applications include, but not limited to, the use of the PRODUCT in;

- Nuclear Power Plants and any other power plants operated by Power companies, and/or any other cases in which the
 public could be affected if any problem or fault occurs in the PRODUCT.
- Railway companies or Public service purposes, and/or any other cases in which establishment of a special quality assurance system is required by the Purchaser or End User.
- Aircraft or Aerospace, Medical applications, Train equipment, transport equipment such as Elevator and Escalator, Incineration and Fuel devices, Vehicles, Manned transportation, Equipment for Recreation and Amusement, and Safety devices, handling of Nuclear or Hazardous Materials or Chemicals, Mining and Drilling, and/or other applications where there is a significant risk of injury to the public or property.

Notwithstanding the above restrictions, Mitsubishi Electric may in its sole discretion, authorize use of the PRODUCT in one or more of the Prohibited Applications, provided that the usage of the PRODUCT is limited only for the specific applications agreed to by Mitsubishi Electric and provided further that no special quality assurance or fail-safe, redundant or other safety features which exceed the general specifications of the PRODUCTs are required. For details, please contact the Mitsubishi Electric representative in your region.

(3) Mitsubishi Electric shall have no responsibility or liability for any problems involving the PRODUCT trouble and system trouble caused by DoS attacks, unauthorized access, computer viruses, and other cyberattacks.

INTRODUCTION

This manual describes the functions provided by MI Configurator.

Before using this product, please read this manual carefully and develop familiarity with the functions and performance of MI Configurator to handle the product correctly.

CONTENTS

SAFI	ETY PRECAUTIONS	
CON	IDITIONS OF USE FOR THE PRODUCT	
INTF	RODUCTION	
	EVANT MANUALS	
TER	MS	
РΔ	ART 1 FUNDAMENTALS OF MI Configurator	
	arti i i crizzamentzale er im eemiganater	
CHA	APTER 1 BEFORE USING THIS PRODUCT	10
1.1	Main Functions of MI Configurator	
1.2	Learning Operation Methods of MI Configurator	
	Displaying Help	
	Connecting to MITSUBISHI ELECTRIC FA Global Website	
	Checking the version of MI Configurator	
1.3	Obtaining MI Configurator	
CHA	APTER 2 SCREEN CONFIGURATION AND BASIC OPERATION	14
2.1	Start and End	
2.2	Display Language Switching	
2.3	Screen Configuration	
	Main frame	
	Connection destination window.	
2.4	Menu List	
PΑ	ART 2 SYSTEM DESIGN AND SETTINGS	
CHA	APTER 3 PROJECT MANAGEMENT	24
3.1	Creating Projects	24
	Creating a project	24
	Opening a project	25
	Saving a project	
3.2	Operating Project Data	
	Editing data	
	Displaying a property	
3.3	Verifying Projects	
	Verifying projects	
	Checking a verification result.	
2 4	Exporting to a file	
3.4	Managing Profiles	
CH	APTER 4 PARAMETER SETTINGS	32
4.1	Common Operations for Parameter Settings	
4.2	Basic Parameters	
4.3	Application Parameter	

PART 3 OPERATIONS

CHA	APTER 5 SETTING ROUTE	36
5.1	Specification of Connection Destination	
5.2	Direct Connection	
5.3	Accessing via GOT (GOT transparent Function)	
	Access via a GOT	40
CHA	APTER 6 DATA READ/WRITE	41
6.1	Writing/Reading MELIPC Data	
	Writing data to a MELIPC	
	Reading data from a MELIPC	42
	Deleting data in a MELIPC	
6.2	Verifying Data with a MELIPC	43
CHA	APTER 7 CHECKING MELIPC OPERATION	44
7.1	Monitoring Status	
7.2	Checking Devices and Buffer Memory in a Batch	
7.3	Checking Current Values by Registering Devices	48
7.4	Checking Values in Shared Memory	
PA	ART 4 MAINTENANCE AND INSPECTION	
0114	ADTED 6 DECTECTING DATA	50
	APTER 8 PROTECTING DATA	
8.1	User Authentication Function	
	Logging on to a MELIPC	
	Logging off from a MELIPC	
8.2	Service Setting Function	
8.3	IP Filtering Function	52
CHA	APTER 9 DIAGNOSTICS	54
9.1	MELIPC Diagnostics	
	Error history/operational history check	
9.2	Network Diagnostics	
	External device configuration diagnostics	
	CC-Link IE Field Network diagnostic	
	CC-Link IE Field Network Basic diagnostic	59
CHA	APTER 10 CHANGING MELIPC OPERATION	60
10.1	Clock Setting	61
10.2	Remote Operation	
10.3	Memory Operation	
	Checking memory usage	
	Initializing/clearing memory	
APF	PENDIX	65
Appe	endix 1 Unsupported Character Strings	65
	endix 2 Installation Procedure of .Net Framework 3.5	

Appendix 3 TROUBLESHOOTING	67
Appendix 4 Using a Project in a Different Version	69
Appendix 5 Additions and Changes from Previous Version	70
INDEX	71
REVISIONS	73
TRADEMARKS	74

RELEVANT MANUALS

Manual name [manual number]	Description	Available form
MI Configurator Operating Manual [SH-081938ENG](this manual)	System configurations, parameter settings, and the operation methods of online functions in MI Configurator.	e-Manual PDF
MELIPC MI5000 Series User's Manual (Startup) [SH-081930ENG]	Performance specifications, procedures before operation, and troubleshooting of a MELPIC.	Print book e-Manual PDF
MELIPC MI5000 Series User's Manual (Application) [SH-081932ENG]	Functions and parameters of a MELIPC.	Print book e-Manual PDF



e-Manual refers to the Mitsubishi Electric FA electronic book manuals that can be browsed using a dedicated tool.

e-Manual has the following features:

- Required information can be cross-searched in multiple manuals.
- Other manuals can be accessed from the links in the manual.
- Hardware specifications of each part can be found from the product figures.
- Pages that users often browse can be bookmarked.

TERMS

Unless otherwise specified, this manual uses the following terms.

Term	Description
Direct connection	A connection using the virtual Ethernet or the Ethernet port (CH1) on a MELIPC.
Fan module	An abbreviation for a fan module for Mitsubishi Electric Industrial PC, MI5FAN.
GOT	Another term for Mitsubishi Graphic Operation Terminal.
Main module	An abbreviation for a main module for Mitsubishi Electric Industrial PC, MI5122.
MELIPC	An abbreviation for Mitsubishi Electric Industrial PC, MI5122-VW. It comprises a main module, a power supply module, and a fan module.
Personal computer	A generic term for personal computers on which Windows operate.
Power supply module	An abbreviation for a power supply module for Mitsubishi Electric Industrial PC, MI5A1P.
Virtual Ethernet	A virtual network that connects the Windows part and VxWorks part in a MELIPC.
VxWorks	A product name for a real-time operating system manufactured by Wind River Systems, Inc.
VxWorks part	A device in which a real-time operating system VxWorks is embedded. The information acquired from a programmable controller CPU or a CC-Link IE Field Network connected device via CC-Link IE Field Network can be processed in this section.
Windows part	A device in which Windows is embedded. Applications for processing complex calculations, such as data analysis, to process various information can run in this section.
Windows [®] 8 or later	A generic term for Windows 8, Windows 8.1, and Windows 10.

PART 1

FUNDAMENTALS OF MI Configurator

This part shows the screen configuration and basic operations of MI Configurator.

1 BEFORE USING THIS PRODUCT

2 SCREEN CONFIGURATION AND BASIC OPERATION

1 BEFORE USING THIS PRODUCT

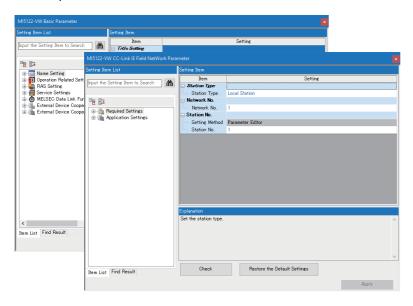
MI Configurator is a dedicated software package for setting and monitoring MELIPC parameters.

1.1 Main Functions of MI Configurator

MI Configurator functions are shown below.

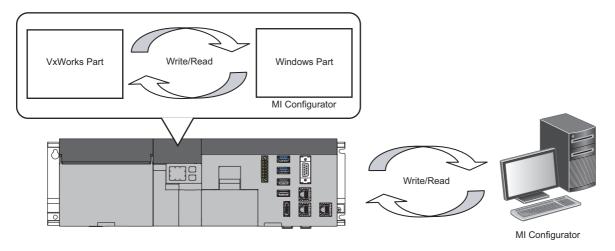
Parameter setting function

MELIPC parameters can be set.



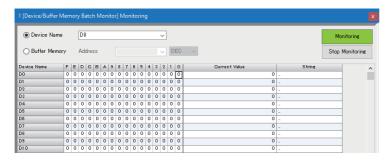
Write to/Read from MELIPC function

Configured parameters can be written to or read from the VxWorks part of a MELIPC with the Write to MELIPC function or the Read from MELIPC function.



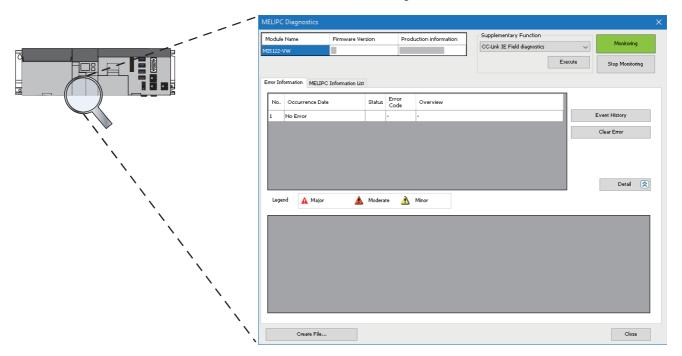
Monitor function

The values of devices and buffer memory on a MELIPC can be monitored.



Diagnostic function

The status of a MELIPC and the network status of the MELIPC can be diagnosed.



1.2 Learning Operation Methods of MI Configurator

This section shows the operation methods of MI Configurator.

Displaying Help

Use Help to learn about operations and functions, and check error codes of the MELIPC.

Operating procedure

Select [Help] ⇒ [MI Configurator Help] (). e-Manual Viewer starts and the manual appears.

Search Help

Enter a search term in on the toolbar and press the term key to start searching it in e-Manual Viewer.

The search is executed in the manuals registered in e-Manual Viewer.

Connecting to MITSUBISHI ELECTRIC FA Global Website

Open the MITSUBISHI ELECTRIC FA Global Website in a web browser.

Make sure your personal computer connect to the Internet in advance.

Operating procedure

Select [Help]

□ [Connection to MITSUBISHI ELECTRIC FA Global Website].

Checking the version of MI Configurator

Display information such as the software version of MI Configurator.

Operating procedure

Select [Help] ⇒ [Version Information].

1.3 Obtaining MI Configurator

This section shows the methods for obtaining MI Configurator.

In Japan

MI Configurator and Installation Instructions can be downloaded from the Mitsubishi Electric FA website.

• www.MitsubishiElectric.co.jp/fa

For downloading MI Configurator and Installation Instructions, please register for a free membership on the Mitsubishi Electric FA website in advance.

In other countries

For information on obtaining MI Configurator and Installation Instructions, please contact your local Mitsubishi Electric sales office or representative.

2 SCREEN CONFIGURATION AND BASIC OPERATION

This chapter shows the screen configuration and basic operations of MI Configurator.

2.1 Start and End

The following shows the operation methods for starting and ending MI Configurator.

Start

Operating procedure

Select [MELSOFT] ⇒ [MI Configurator]^{*2}⇒[MI Configurator] from Windows Start^{*1}.

- *1 Select [All apps] in the Start screen or [Start] ⇒ [All Programs]/[All apps].
- *2 Does not appear in Windows 8 or later.

End

Operating procedure

Select [Project] ⇒ [Exit]

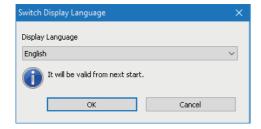
2.2 Display Language Switching

This section shows the method for switching the display language in MI Configurator.

MI Configurator supports multiple languages, and therefore the display language such as one on the menu can be switched on a personal computer.

Window

[View] ⇒ [Switch Display Language]



Precautions

- If the display language differs from the one for the operating system, texts may not displayed properly on the screen. (Displayed texts may get cut.)
- When switching the display language on Windows 10, supplemental fonts of the target language are required.
 Windows Start ⇒ [Settings] ⇒ [System] ⇒ [Apps & features] ⇒ [Manage optional features] ⇒ [Add a feature]

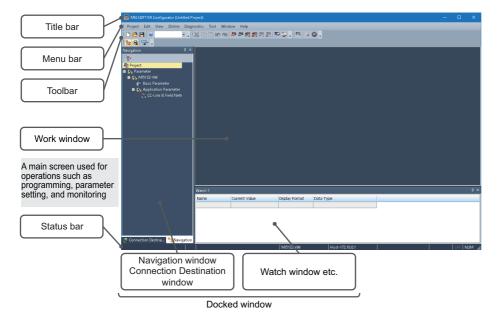
2.3 Screen Configuration

This section shows the screen configuration when MI Configurator is started.

Main frame

The main frame configuration is shown below.

The following screen includes a work window and docked windows displayed.



Window operation

The following shows the operation methods for each window.

■ Docking window

[View] ⇒ [Docking Window] ⇒ [(target item)]

■ Switching docked windows and a work window

Various windows or files can be switched by pressing the train keys.

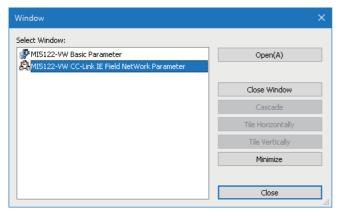
Select with Ctrl+ ← / → / ↑ / ↓ .

■ Arranging work windows

The list of open windows appears.

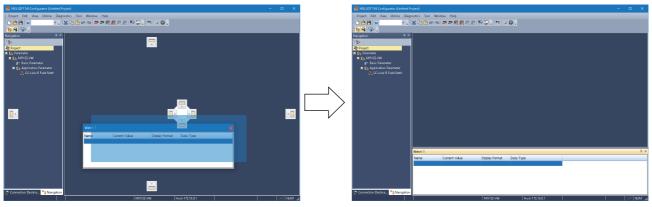
When multiple windows are open, they can efficiently be displayed by arranging them

Window



■ Docking/floating dockable windows

• Docked display: Drag the title bar of a floating dockable window and drop it to the displayed icon (guidance) to dock the main frame.



• Floating display: Drag the title bar of a docked window and drop it to the arbitrary position to float from the main frame.

■ Docking/floating work windows

- Docked display: Select the floating work window and select [Window]

 □ [Docking].
- Floating display: Select the docked work window and select [Window] ⇒ [Floating].



Docked windows can be switched between the docked display and the floating display by double-clicking the title bar.

Customizing/resetting toolbars

The following shows the method for customizing/resetting the toolbar. Items selected in the list are displayed as tool bar buttons.

■ Customizing toolbar

Set the types of tool buttons to be displayed on each toolbar.

Operating procedure

- **1.** Click \blacksquare on the toolbar, and select [Show/Hide Buttons] \Rightarrow [(toolbar name)].
- **2.** Select the tool button to be displayed from the list.

■ Resetting toolbar

Reset customized tool bars.

Operating procedure

1. Click on the toolbar, and select [Show/Hide Buttons] ⇒ [Reset].

Navigation window

The following shows the screen configuration of the "Navigation" window.

The "Navigation" window displays contents of a project in a tree format.

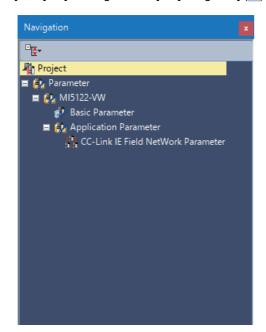
Operations such as creating new data and displaying editing screens can be performed on the tree.

For details, refer to the following section.

Page 24 PROJECT MANAGEMENT

Window

[View] ⇒ [Docking Window] ⇒ [Navigation] (%)



Connection destination window

The screen configuration of the "Connection Destination" window is shown below.

The "Connection Destination" window displays the connection destination for a MELIPC in a list format.

For setting methods of a connection destination, refer to the following section.

☐ Page 36 SETTING ROUTE

Window

 $[View] \Rightarrow [Docking Window] \Rightarrow [Connection Destination] ()$



2.4 Menu List

This section shows the menus for MI Configurator.

Basic menus		
[Project]	Reference	
⇒ [New]	Page 24 Creating a project	
⇒ [Open]	Page 25 Opening a project	
⇒ [Close]	_	
⇒ [Save]	Page 26 Overwriting projects	
⇒ [Save as]	Page 26 Saving projects under the specified name	
⇒ [Project Verify]	Page 29 Verifying Projects	
⇒ [Data Operation] ⇒ [Delete Data]	Page 27 Deleting data	
⇒ [Data Operation] ⇒ [Copy Data]	Page 27 Copying/pasting data	
⇒ [Data Operation] ⇒ [Paste Data]		
⇒ [Data Operation] ⇒ [Property]	Page 28 Displaying a property	
⇒ [Recent Projects] ⇒ [(project path used recently 1 to 10)]	_	
⇒ [Exit]	Page 14 Start and End	
[Edit]	Reference	
⇒ [Undo]	_	
⇒ [Redo]		
⇒ [Cut]		
⇒ [Copy]		
⇒ [Paste]		
[View]	Reference	
⇒ [Toolbar] ⇒ [Standard]	Page 15 Main frame	
⇒ [Toolbar] ⇒ [Edit/Online]		
⇒ [Toolbar] ⇒ [Docking Window]		
□ [Toolbar] □ [Monitor Status]		
⇒ [Statusbar]		
⇒ [Docking Window] ⇒ [Navigation]	Page 18 Navigation window	
⇒ [Docking Window] ⇒ [Connection Destination]	Page 19 Connection destination window	
⇒ [Docking Window] ⇒ [Watch 1] to [Watch 4]	Page 48 Checking Current Values by Registering Devices	
⇒ [Switch Display Language]	Page 14 Display Language Switching	

[Online]	Reference	
⇒ [Current Connection Destination]	Page 36 SETTING ROUTE	
⇒ [Read from MELIPC]	Page 42 Reading data from a MELIPC	
⇒ [Write to MELIPC]	Page 42 Writing data to a MELIPC	
⇒ [Verify With MELIPC]	Page 43 Verifying Data with a MELIPC	
⇒ [Remote Operation]	Page 62 Remote Operation	
⇒ [MELIPC Memory Operation]	Page 63 Memory Operation	
⇒ [Delete MELIPC Data]	Page 42 Deleting data in a MELIPC	
⇒ [Set Clock]	Page 61 Clock Setting	
⇒ [Monitor] ⇒ [Start Monitoring (All Windows)]	Page 45 Monitoring Status	
⇒ [Monitor] ⇒ [Stop Monitoring (All Windows)]		
⇒ [Monitor] ⇒ [Start Monitoring]		
⇒ [Monitor] ⇒ [Stop Monitoring]		
⇒ [Monitor] ⇒ [Change Value Format (Decimal)]		
⇒ [Monitor] ⇒ [Change Value Format (Hexadecimal)]		
⇒ [Monitor]⇒ [Device/Buffer Memory Batch Monitor]	Page 46 Checking Devices and Buffer Memory in a Batch	
⇒ [Monitor] ⇒ [Share Memory Monitor]	Page 49 Checking Values in Shared Memory	
⇒ [Watch] ⇒ [Start Watching]	Page 48 Checking Current Values by Registering Devices	
⇒ [Watch] ⇒ [Stop Watching]		
⇒ [User Authentication] ⇒ [Log on to MELIPC (VxWorks part)]	Page 52 User Authentication Function	
□ [User Authentication] □ [Log off from MELIPC (VxWorks part)]		
[Diagnostic]	Reference	
⇒ [MELIPC Diagnostics]	Page 54 MELIPC Diagnostics	
⇒ [External Device Configuration Diagnostics]	Page 57 External device configuration diagnostics	
⇒ [CC-Link IE Field Diagnostics]	Page 58 CC-Link IE Field Network diagnostic	
⇒ [CC-Link IEF Basic Diagnostics]	Page 59 CC-Link IE Field Network Basic diagnostic	
[Tool]	Reference	
⇒ [Profile Management] ⇒ [Register]	Page 31 Managing Profiles	
⇒ [Profile Management] ⇒ [Register]		
[Window]	Reference	
⇒ [Cascade]		
	_	
⇒ [Tile Vertically]		
⇒ [Tile Vertically] ⇒ [Tile Horizontally]		
⇒ [Tile Horizontally]		
⇒ [Tile Horizontally] ⇒ [Arrange Icons]		
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows]		
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status]		
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split]	Page 15 Screen Configuration	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split]	Page 15 Screen Configuration	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating]	Page 15 Screen Configuration	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Docking]	Page 15 Screen Configuration	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Docking] ⇒ [(Window information being displayed)]	Page 15 Screen Configuration Reference	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Docking] ⇒ [(Window information being displayed)] ⇒ [Window]		
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Oocking] ⇒ [(Window information being displayed)] ⇒ [Window] [Help]	Reference	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating]	Page 15 Screen Configuration	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Docking] ⇒ [(Window information being displayed)] ⇒ [Window]		
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Docking] ⇒ [(Window information being displayed)] ⇒ [Window] [Help] ⇒ [MI Configurator Help]	Reference	
⇒ [Tile Horizontally] ⇒ [Arrange Icons] ⇒ [Close All Windows] ⇒ [Return Window Layout to Initial Status] ⇒ [Split] ⇒ [Restore Split] ⇒ [Floating] ⇒ [Docking] ⇒ [(Window information being displayed)] ⇒ [Window] [Help] ⇒ [MI Configurator Help]	Reference Page 12 Displaying Help	

Available menus when displaying a parameter setting screen

[Edit]	Reference
⇒ [IP Address Input Format] ⇒ [Decimal]	_
⇒ [IP Address Input Format] ⇒ [Hexadecimal]	

Available menus when displaying verification results

[Edit]	Reference
⇒ [Export to File]	_
[View]	Reference
⇒ [Toolbar] ⇒ [Verify Result]	_
⇒ [Return to Result List]	
⇒ [Close Detailed Result]	
⇒ [Close All Detailed Result]	

Available menus when editing the Device/Buffer Memory Batch Monitor window

[View]	Reference
⇒ [Toolbar] ⇒ [Device/Buffer Memory Batch Monitor]	_
⇒ [Display Format Detailed Setting]	

Available menus when editing the Shared Memory Monitor window

	-
[View]	Reference
⇒ [Toolbar] ⇒ [Share Memory Monitor]	_

PART 2

SYSTEM DESIGN AND SETTINGS

This part shows the system design including project management and parameter settings.

3 PROJECT MANAGEMENT

4 PARAMETER SETTINGS

3 PROJECT MANAGEMENT

This chapter shows the methods for basic operations and project management.

3.1 Creating Projects

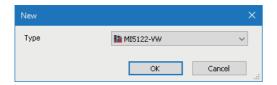
This section shows basic operations of MI Configurator such as creating, opening, and saving projects.

Creating a project

Create a new project.

Window

[Project] ⇒ [New] (□)



Operating procedure

Set each item and click the [OK] button.

Creating new projects by reading data from a MELIPC

When data is read from a MELIPC without creating a new project, a new project is created based on the data from the MELIPC.

Operating procedure

- 2. Set a communication route to access an MELIPC, and click the [OK] button. (Page 36 SETTING ROUTE)
- 3. Read data from the MELIPC using the "Online Data Operation" screen. (Page 41 Writing/Reading MELIPC Data)



If MI Configurator is not logged on to a MELIPC, a screen to logon to a MELIPC may appear. Enter a user name and password to logon to the MELIPC. (Page 52 User Authentication Function)

Precautions

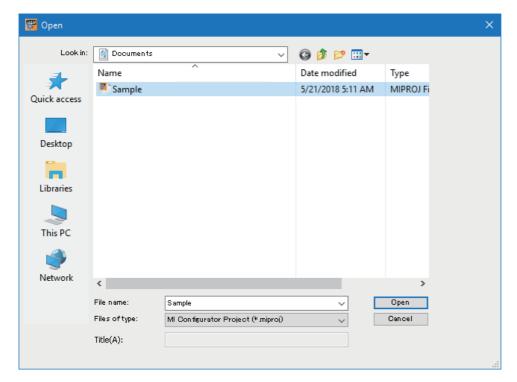
When parameters are not read from a MELIPC with data to create a new project, default parameters will be set. Check the parameter settings.

Opening a project

Read a saved project.

Window

[Project] ⇒ [Open] (≧)



Operating procedure

Set each item and click the [Open] button.

Precautions

Opening a project being edited by another user

The project can be opened as a read-only project. However, the following functions cannot be used.

· Overwriting projects

■ Projects saved on a network drive or removable media

Do not open the project saved in a network drive or removable media directly. Open it after saving it to a local drive.

Saving a project

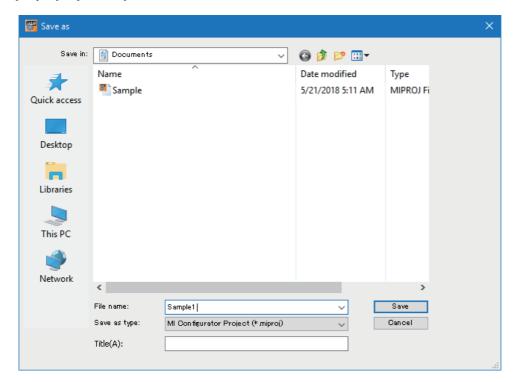
Save a project.

Saving projects under the specified name

Save a project under the specified name.

Window

[Project] ⇒ [Save As]



Operating procedure

Set each item and click the [Save] button.

Precautions

For the unusable character strings for a project or path name, refer to the following section.

Page 65 Unsupported Character Strings

Overwriting projects

Overwrite the existing project.

Operating procedure

[Project] ⇒ [Save]

3.2 Operating Project Data

This section shows the method for editing data and displaying property.

Editing data

Copying/pasting data

Utilize the data of project being edited or other projects.

Data cannot be copied/pasted between projects with different module type.

Operating procedure

- 1. Select a data name in a copy source in the "Connection Destination" window.
- **2.** Select [Project] ⇒ [Data Operation] ⇒ [Copy Data] ().
- **3.** Select a folder to paste the data (one-level upper hierarchy of the copy source data) in the "Connection Destination" window or other projects.
- **4.** Select [Project] ⇒ [Data Operation] ⇒ [Paste Data] (🖺).

Deleting data

Data can be deleted from the open project.

Operating procedure

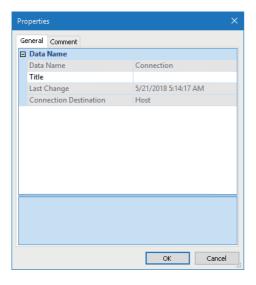
- 1. Select data to delete in the "Connection Destination" window.
- **2.** Select [Project] ⇒ [Data Operation] ⇒ [Delete Data].

Displaying a property

Display the properties of data such as a parameter.

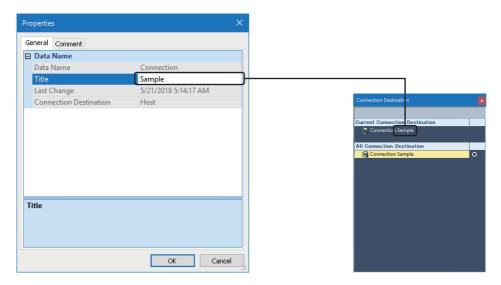
Window

Select [Project] ⇒ [Data Operation] ⇒ [Properties] ().



Title

The title set in the "Properties" screen is displayed in the "Navigation" window and the "Connection Destination" window with the data name.



3.3 Verifying Projects

Verify an open project with another project.

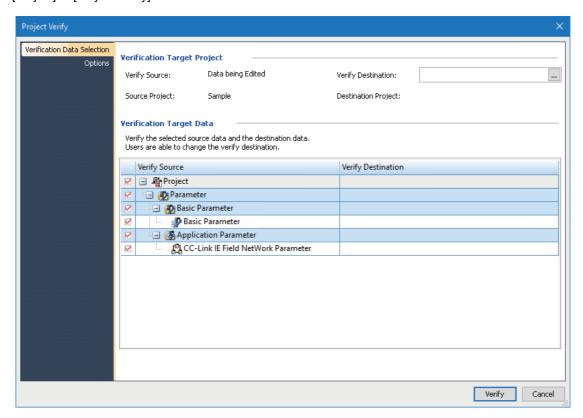
Use this function to check whether project details are the same.

Verifying projects

Verify two projects.

Window

[Project] ⇒ [Project Verify]



Operating procedure

- 1. Specify a project for "Verify Destination" on the [Verification Data Selection] tab.
- Select the data to be verified, and click the [Verify] button.



The verification destination project can also be specified by dragging and dropping.

Precautions

Project verification is available between MI Configurator projects. A project other than MI Configurator cannot be verified. (Frage 43 Verifying Data with a MELIPC)

Verification level

Only parameter areas which are set by a user can be verified.

A parameter verification level can be checked in the [Options] tab of the "Project Verify" screen.

Checking a verification result

Check the details of mismatched data on the "Verify Result" screen.

Operating procedure

Select and double-click a row of data to be displayed in detail in the "Verify Result" screen.



The latest data is displayed in the verification source. Therefore, the verification result can be checked with the latest data of a verification source without verifying again after mismatched data is modified.

Exporting to a file

Export data, which is displayed on the "Verify Result" screen, to a file.

Operating procedure

Select [Edit] \Rightarrow [Export to File](\P).

3.4 Managing Profiles

The registration status of a profile (such as CSP+*1) can be managed.

A profile is data that stores information of a connected device (such as a model name.)

A profile is managed by each personal computer, and shared among MI Configurator and other MELSOFT products.

Therefore, a profile registered in MI Configurator is applied to other MELSOFT products.

Before registering/deleting a profile, log on the personal computer as the user with the administrator authority, and close the project in advance.

*1 For CSP+, refer to the CC-Link Partner Association website (www.cc-link.org).

Registering a profile

A profile can be registered in MI Configurator.

Operating procedure

- **1.** Select [Tool] ⇒ [Profile Management] ⇒ [Register].
- 2. Select a file on the "Register Profile" screen, and click the [Register] button.

Precautions

A profile is a compressed file (such as *.zip, *.ipar, and *.cspp).

Register a profile without decompressing.

Deleting a profile

A registered profile can be deleted from MI Configurator.

Operating procedure

- **1.** Select [Tools] ⇒ [Profile Management] ⇒ [Delete].
- 2. Select a model name to be deleted on the "Profile Delete" screen, then click the [Delete] button.

4 PARAMETER SETTINGS

The following shows the MELIPC parameter settings.

Configuring parameters is necessary to operate a MELIPC.

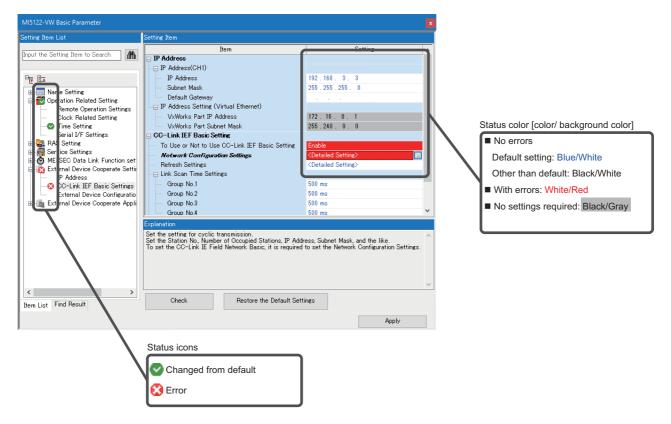
4.1 Common Operations for Parameter Settings

This section shows the operation methods for setting parameters.

Operation for parameter editor

Parameter items in the basic parameters and application parameters are displayed by purpose.

Before setting parameters, refer to explanations of each of these. Additionally, enter keywords to search for setting items and explanations.



Parameter check

To check errors, click the [Check] button.

Returning parameters to the default

By clicking the [Restore to Default Settings] button, the parameters displayed in the screen is returned to the default.

Precautions

The station type settings in the CC-Link IE Field Network parameter affect other setting items in the CC-Link IE Field Network parameter; therefore, even if the operation to return the parameter to the default is attempted, it will not return to the state when the project was newly created (local station). However, by changing the station type, all the items in the CC-Link IE Field Network parameter are returned to the default of the station which was selected in the station type.

4.2 Basic Parameters

Set the basic parameters for a MELIPC.

For details on the parameter settings, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Setting procedure

The procedure for setting the basic parameters is as follows.

Operating procedure

- **1.** Double-click [Navigation window] ⇒ [MI5122-VW] ⇒ [Basic Parameter].
- **2.** Set the items in the parameter editor.
- 3. Click the [Apply] button.

4.3 Application Parameter

Set the application parameters for a MELIPC.

For details on the parameter settings, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Setting procedure

The procedure for setting application parameters is as follows.

Operating procedure

- **1.** Double-click [Navigation window] ⇒ [MI5122-VW] ⇒ [Application Parameter].
- 2. Set the items in the parameter editor.
- 3. Click the [Apply] button.

MEMO

PART 3

OPERATIONS

This part shows operating methods for MELIPCs.

5 SETTING ROUTE

6 DATA READ/WRITE

7 CHECKING MELIPC OPERATION

5 SETTING ROUTE

This chapter shows the method for setting a connection destination for accessing the VxWorks part of a MELIPC from MI Configurator, which is installed on the Windows part of the MELIPC or a personal computer.

5.1 Specification of Connection Destination

This section shows the setting method for accessing the VxWorks part of a MELIPC. Up to 128 settings for connection destinations is created.

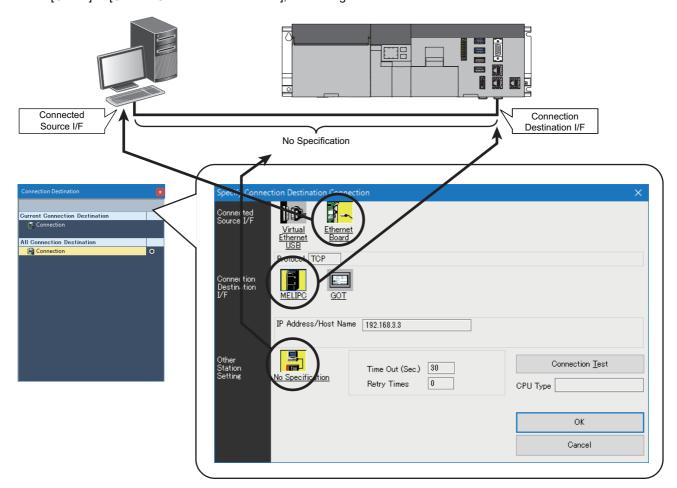
Precautions

Only connection routes that can be set in the "Specify Connection Destination" screen are acceptable.

Changing connection destination settings

Window

Select and double-click data in the "Connection Destination" window
Select [Online] ⇒ [Current Connection Destination], and change the current connection destination.



- The details of an item underlined on the screen can be set by double-clicking it.
- The icon of an item that has already been set is highlighted in yellow.

Displayed items

Item		Description	
Other Station Setting	No Specification	Specify this to access a MELIPC without rooting another station.	
Network Communication Route		Select a network type, network number, station number, and start I/O number of the network to be routed through to access another station. The setting items differ depending on the selected network type.	

Precautions

■ When communication with MI Configurator is not allowed by Windows Firewall

When Windows Firewall is enabled and communication with MI Configurator is not allowed, a timeout may occur. To allow the communication, refer to the following procedure.



When using other software with a firewall function, refer to the manual of the software and allow the communication with MI Configurator.

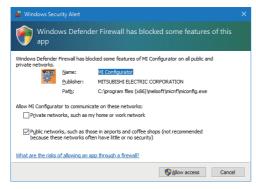


For Windows 7

- **1.** Select [Control Panel] from Windows Start ⇒ [System and Security] ⇒ [Windows Firewall] ⇒ [Allow a program or feature through Windows Firewall]^{*1}.
- **2.** Click the [Change settings] button, and click the [Allow another program]^{*2} button.
- **3.** Select "MI Configurator" in the "Add a Program" screen*3, and click the [Add] button.
- **4.** Select the checkboxes of "Domain", "Home/Work (Private)", and "Public" of MI Configurator, which was added in the list, and click the [OK] button.
- *1 Windows 8 or later: [Allow an app or feature to communicate through Windows Firewall]
- *2 Windows 8 or later: [Allow another app]
- *3 Windows 8 or later: "Add an app" screen.

■ When "Windows Security Alert" screen appears

When setting a connection destination, the "Windows Security Alert" screen may appear.



Select one of the following item, and click the [Allow access] button.

- "Private networks, such as my home or work network"
- "Public networks, such as those in airports and coffee shops"

Adding connection destination settings

Add a new setting of a connection destination.

Operating procedure

- **1.** Right-click in the "Connection Destination" window and select [Create New Connection Destination] from the shortcut menu.
- **2.** Set each item and click the [OK] button.

Switching connection destination

Switch a connection destination used as the default.

Operating procedure

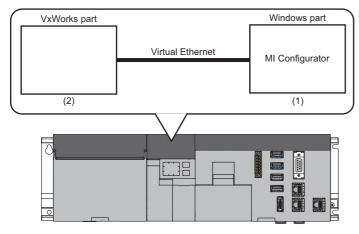
- 1. Select a connection destination under "All Connection Destination" in the "Connection Destination" window.
- 2. Right-click and select [Set as Default Connection] from the shortcut menu.

5.2 Direct Connection

This section shows the setting method for directly accessing the VxWorks part of a MELIPC from a connected personal computer or the Windows part of a MELIPC.

Virtual Ethernet connection

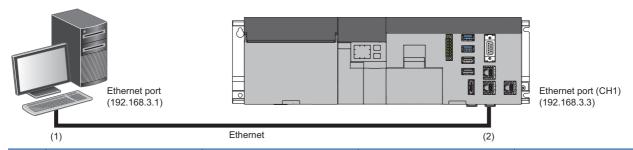
The following shows the setting example for accessing the VxWorks part from MI Configurator, which is installed on the Windows part of the MELIPC, using a virtual Ethernet.



No.	Item	Item to be selected	Internal setting	Input value
(1)	Connected Source I/F	Virtual Ethernet/USB	Virtual Ethernet	_
(2)	Connection Destination	MELIPC	_	_
	Other Station Setting	No Specification	Check at	30 seconds
			Retry Times	0 time

Ethernet connection

The following shows the setting example for accessing the VxWorks part of a MELIPC from MI Configurator, which is installed on a personal computer or the Windows part of another MELIPC, using an Ethernet.



No.	Item	Item to be selected	Internal setting	Input value
(1)	Connected Source I/F	Ethernet Board	Protocol	TCP
(2)	Connection Destination	MELIPC	IP Address	192.168.3.3
	Other Station Setting	No Specification	Check at	30 seconds
			Retry Times	0 time

5.3 Accessing via GOT (GOT transparent Function)

This section shows the setting method for accessing the VxWorks part of a MELIPC from MI Configurator via a GOT by performing the GOT transparent function.

Precautions

■ When performing online operations from MI Configurator

During the online operation from MI Configurator to the VxWorks part of a MELIPC using the GOT transparent function, do not perform online operations (such as downloading project data) on GOT from GT Designer3.

■ When a GOT does not perform normal monitoring

The GOT transparent function cannot be used in the following cases.

- When a GOT does not perform normal monitoring due to MELIPC errors or communication errors between the MELIPC and the GOT
- During the period of time between turning ON or resetting the MELIPC or GOT and the start of GOT monitoring Check the following items if monitoring on GOT is not normal.

Item	Reference
Does the MELIPC operate normally?	☞ Page 54 DIAGNOSTICS
Is the MELIPC connected to GOT normally?	Manual of GOT used

Access via a GOT

The following shows the configuration when accessing the VxWorks part of a MELIPC from a personal computer or the Windows part of another MELIPC via a GOT.



The connection availability and the specification method of connection destination differ depending on a GOT series and the connection condition between a personal computer or the Windows part of a MELIPC and a GOT.

For details, refer to the following manual.

GOT2000 Series Connection Manual (Mitsubishi Products) For GT Works3 Version1

6 DATA READ/WRITE

This chapter shows operations to read, write, delete and verify data in a MELIPC.

For the method to write clock settings to a MELIPC, refer to the following section.

Page 61 Clock Setting



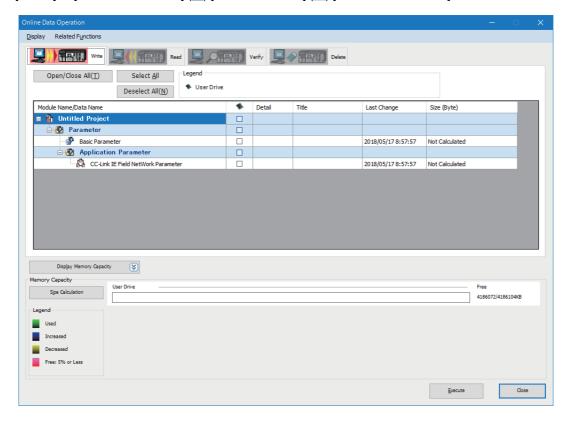
If MI Configurator is not logged on to a MELIPC, a screen to logon to a MELIPC may appear. Enter a user name and password to logon to the MELIPC. (Page 52 User Authentication Function)

6.1 Writing/Reading MELIPC Data

Read/write data to/from a MELIPC in the "Online Data Operations" screen.

Window

[Online] ⇒ [Read from MELIPC] (♣)/[Write to MELIPC] (♣)/[Delete MELIPC Data]



Writing data to a MELIPC

Write data to a MELIPC.

Operating procedure

- 1. Select the [Write] tab in the "Online Data Operations" screen.
- 2. Select the data to be written.
- 3. Click the [Execute] button.

Parameter application timing

The following shows the timing that the parameters written to this product are applied.

○: Applied, ×: Not applied

Parameter	Application timing	
	Reset by powering OFF and ON	
Basic parameter	0	
CC-Link IE Field Network parameter		

Reading data from a MELIPC

Read data from a MELIPC.

Operating procedure

- 1. Select the [Read] tab in the "Online Data Operations" screen.
- 2. Select the data to be read.
- 3. Click the [Execute] button.



Data can be read from a MELIPC even when a project is not open.

Page 24 Creating new projects by reading data from a MELIPC

Deleting data in a MELIPC

Delete parameters in a MELIPC.

Operating procedure

- 1. Select the [Delete] tab in the "Online Data Operations" screen.
- 2. Select the data to be deleted.
- 3. Click the [Execute] button.

6.2 Verifying Data with a MELIPC

This section shows the method for verifying data with the one in a MELIPC.

This function can be used to check whether the data in the open project and in a MELIPC are consistent.

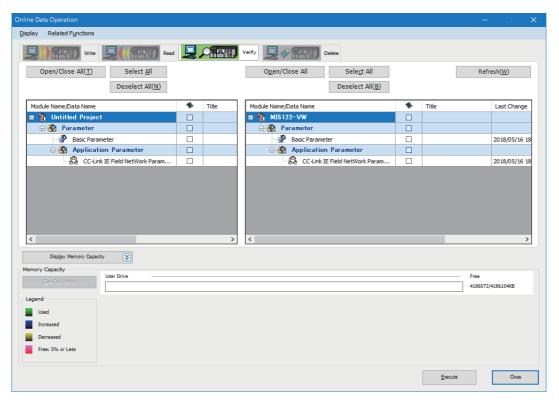


To verify data between projects, perform project verification.

Page 29 Verifying Projects

Window

[Online] ⇒ [Verify With MELIPC]



Operating procedure

- 1. Select the data to be verified.
- 2. Click the [Execute] button.

Checking a verification result

The operation method for displaying the verification result is the same as the Project Verify function.

Page 30 Checking a verification result

7

CHECKING MELIPC OPERATION

This chapter shows how to check the execution status of a MELIPC.

Item	Description	Reference
Monitor status bar	To check the MAIN ERR LED status of a MELIPC.	Page 45 Monitoring Status
Device/buffer memory batch monitor	To check the current values of devices or buffer memory in a batch.	Page 46 Checking Devices and Buffer Memory in a Batch
Watch window	To register devices and check their current values.	Page 48 Checking Current Values by Registering Devices
Shared memory monitor	To check the values on the shared memory.	Page 49 Checking Values in Shared Memory

Changing current values

The operation of a MELIPC can be checked by changing the current values of devices, buffer memory, and shared memory using the change current value function.

This function turns bit devices ON/OFF forcibly in a MELIPC. The current values of word devices, buffer memory, and shared memory can be changed forcibly as well.

Current values can be changed in the following screens.

- Device/Buffer Memory Batch Monitor screen
- · Watch window
- · Shared Memory Monitor screen



If MI Configurator is not logged on to a MELIPC, a screen to logon to a MELIPC may appear. Enter a user name and password to logon to the MELIPC. (Page 52 User Authentication Function)

7.1 Monitoring Status

This section shows the method to start and stop monitoring, and to check the monitoring status.

Starting and stopping various monitors

Monitoring can be started and stopped with any of the following methods.

Operating procedure

- [Online] ⇒ [Monitor] ⇒ [Start Monitoring (All Windows)]/[Stop Monitoring (All Windows)]
- [Online]

 □ [Monitor]

 □ [Start Monitoring]/[Stop Monitoring]
- [Online]

 □ [Watch]

 □ [Start Watching]/[Stop Watching]

Monitoring status

During monitoring in the work window, the monitor status is displayed in the monitor status bar.

Window



Displayed items

Item	Description	Display contents	
Connection status	Displays the connection status with a MELIPC. The "Transfer Setup" screen appears by clicking the icon.(Page 36 SETTING ROUTE)		MELIPC connection
MELIPC operating status	Displays the status of a MELIPC operated by the STOP/MAIN RUN switch on the MELIPC or remote operation from MI Configurator.		MAIN RUN
			STOP
MAIN ERR status	Displays the MAIN ERR LED status of a MELIPC. Click this icon to display the "MELIPC Diagnostics" screen. (Page 54 MELIPC Diagnostics)	②	Monitoring not implemented
			MAIN ERR LED: Off
		<u>U</u> ↔ <u>U</u>	MAIN ERR LED: On
		<u> </u>	MAIN ERR LED: Flashing

7.2 Checking Devices and Buffer Memory in a Batch

Check the devices or buffer memory in a batch using the device/buffer memory batch monitor function.

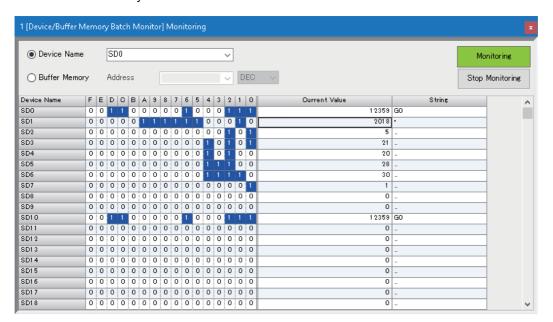
If multiple monitoring screens are open, lead time to start monitoring and monitoring intervals may become longer.

Window

Toolbar



· Device/Buffer Memory Batch Monitor screen





Up to 64 monitoring screens can be displayed at once. The numbers are displayed at the start of the screen title.

Operating procedure

■ Monitoring devices in a batch

Enter the device (start number) to be monitored in "Device Name".

■ Monitoring buffer memory in a batch

Enter the item to check to "Address."

Device list

For details on MELIPC devices and buffer memory, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Changing current values

• Jn\X, Jn\Y, Jn\SB

■ To change current values when data type is other than bit

The current value of a device whose data type is other than bit can be changed after registering the target device to a Watch window.

Open a Watch window by double-clicking a device whose data type is other than bit, or selecting a target device and pressing the the thing is automatically registered. (Page 48 Checking Current Values by Registering Devices)

Changing display format

Display format in a monitoring screen can be changed in the toolbar.

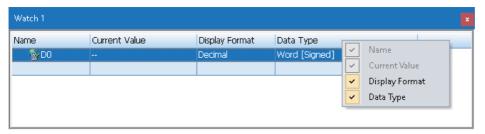
7.3 Checking Current Values by Registering Devices

To register devices and check their current values, use the Watch function. Register the devices to be checked in a Watch window.

Once devices are registered and the project is saved, the registered devices are displayed as registered even when the project is next opened.

Window

[View] ⇒ [Docking Window] ⇒ [Watch 1] to [Watch 4] (🐷)



Select display format to enable selection of a line-by-line display format from the displayed drop-down list. Additionally, items to display on the Watch window can be selected from the right-click menu.

Operating procedure

- Register devices to monitor.
- **2.** Select [Online] ⇒ [Watch] ⇒ [Start Watching].

"[Watching]" is added in the Watch window title during monitoring.

Registering a device to a Watch window

Register a device to monitor in a Watch window.

Operating procedure

- 1. Open a Watch window.
- 2. Enter a device to be registered in the "Name" column, and press the telegistered key.

Precautions

If a device that does not exist in the MELIPC is registered in a Watch window, then the current value, display format, and data type of the device will be displayed as '--'.

For devices that can be used for MELIPCs, refer to the following section.

MELIPC MI5000 Series User's Manual (Application)

Changing current values

A value can be directly entered in "Current Value" during monitoring.

For a bit device, select a row and double-click with pressing the shift key or press the shift keys to change the current value.

Importing to/exporting from file

Export/import the information displayed in the Watch window to/from a file.

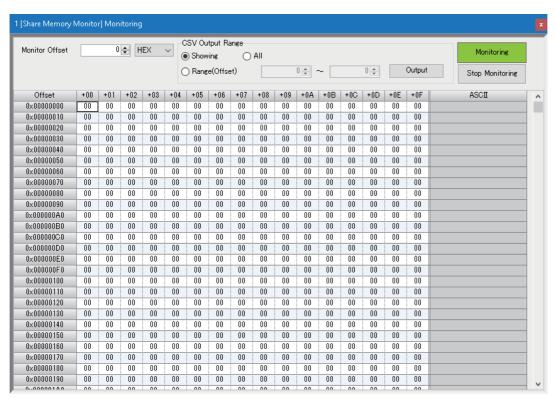
Operating procedure

Select a row in a Watch window, and right-click and select [Import File]/[Export to File].

7.4 Checking Values in Shared Memory

To check values in the shared memory, which can be accessed from both VxWorks part and Windows part of a MELIPC, the shared memory monitoring function can be used.

Window



Operating procedure

Enter an offset value of the memory to check for "Monitor Offset".

Changing current values

A current value can be changed in the "Modify Value" window displayed by double-clicking a cell, or by pressing the test key during monitoring.

Window



Displayed items

Item	Description	Setting range
Changing current values	Change a current value in the shared memory monitor screen.	Decimal: 0 to 255 Hexadecimal: 00 to FFH

Outputting data

By pressing the [Output] button, the data in the shared memory in monitoring is output to a CSV file. During the output processing, the shared memory monitoring is stopped.

■ CSV file

A CSV file is output in the following format.

• File name format: SharedMemory_(number)_(start address)_(end address)_(date).csv

Item	Description	Format
No.	A number start with '1'	3-digit in decimal (zero padding)
Start address	A start address of the data stored in a file.	8-digit in decimal (start number is '0' and zero padding)
End address	Start address of the data stored in a file	8-digit in decimal (start number is '0' and zero padding)
Date	Year, month, date, and time (hour, minutes, seconds) when saving a file	AD: 4 digits (zero padding) Year: 2 digits (zero padding) Month: 2 digits (zero padding) Hour, minutes, seconds: 2 digits for each (zero padding)



The maximum data size that can be saved in one file is as follows.

• 9600000 bytes (5000 packets×1920 bytes÷packet)

If data that exceeds the maximum data size is output, it will be saved as split files. (When all the ranges are specified, it is saved in 28 files.)

PART 4

MAINTENANCE AND INSPECTION

This part shows the inspection and maintenance of a MELIPC.

8 PROTECTING DATA

9 DIAGNOSTICS

10 CHANGING MELIPC OPERATION

8 PROTECTING DATA

This chapter shows the method for protecting data on a MELIPC.

8.1 User Authentication Function

The operations can be restricted by registering a user/password in a MELIPC.

For details on the user authentication function, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)



To access to a MELIPC, logging on with the registered user information (user name/password) is required.

Logging on to a MELIPC

Logging on is required to access a MELIPC.

Enter the user name and the password, that are registered in the MELIPC, to log on.

Operating procedure

- Select [Online]

 □ [User Authentication]
 □ [Log on to MELIPC (VxWorks part)].
- 2. Enter each item in the "User Authentication" screen, and click the [OK] button.

Logging off from a MELIPC

Log off from a logged on MELIPC.

Operating procedure

Select [Online]

□ [User Authentication]

□ [Log off from MELIPC (VxWorks part)].

8.2 Service Setting Function

Restricting services can prevent unauthorized access from other users.

For details on the service setting function, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

8.3 IP Filtering Function

Specifying the IP address of a target device restricts access from other devices using Ethernet port (CH1). Restricting access to communications routes using Ethernet can provide optimal security for the network environment.

For details on the IP filtering function, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)



For security for Ethernet port (CH2), use the Windows standard functions or security software.

9 DIAGNOSTICS

This chapter shows the diagnostic functions for a MELIPC.

Item	Description
MELIPC diagnostics	☐ Page 54 MELIPC Diagnostics
Network diagnostics	Page 57 External device configuration diagnostics
	Page 58 CC-Link IE Field Network diagnostic
	☐ Page 59 CC-Link IE Field Network Basic diagnostic

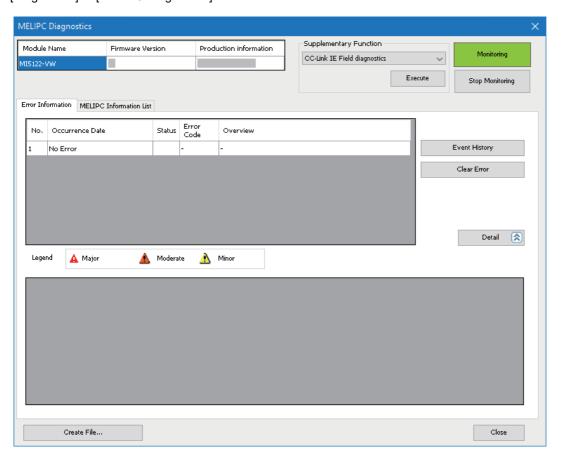


If MI Configurator is not logged on to a MELIPC, a screen to logon to a MELIPC may appear. Enter a user name and password to logon to the MELIPC. (Page 52 User Authentication Function)

9.1 MELIPC Diagnostics

MELIPC operating status and error information can be checked.

Window



Error information

The error history registered in the diagnostics target is displayed in the [Error information] tab.

■ Display contents

Up to 16 current errors will be displayed in the chronological order. The 17th and subsequence errors are not displayed. If an error code the same as a currently displayed error code is generated, then the displayed details will not be updated.

■ Event History

Event codes generated in the MELIPC are displayed. (Page 56 Error history/operational history check)

■ Clear Error

After the errors displayed in the "MELIPC Diagnostics" screen are cleared, click the [Clear Error] button to clear the error status of the MELIPC. (The LED that indicates error status on the MELIPC turns OFF.)

The error contents are also deleted from the error information list.

Precautions

Only continuation errors can be cleared. Stop errors cannot be cleared.

MELIPC information list

The current LED information and switch information of a target module are displayed in the [MELIPC Information List] tab.

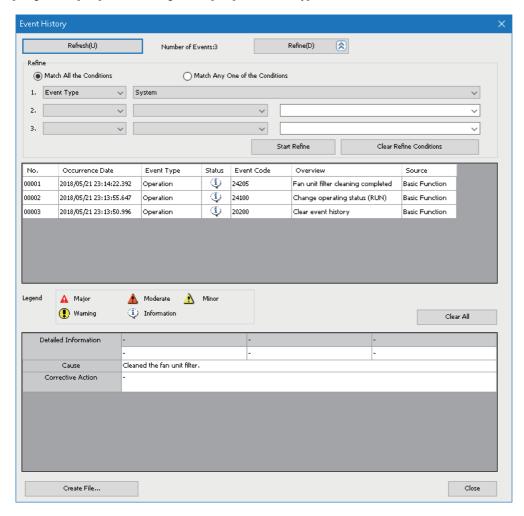
Error history/operational history check

Using the event history function, errors that occur on a MELIPC, operational history, and system information history can be checked.

Error history detailed information is only displayed when using devices supported by the error history sampling function.

Window

[Diagnostics] ⇒ [MELIPC Diagnostics] ⇒ [Event History] button



Operating procedure

■ Event history refinement

- Select either "Match All the Conditions" or "Match Any One of the Conditions".
- 2. Set the conditions.
- 3. Click the [Start Refine] button.

The event histories with the filtering conditions applied are displayed.

■ Event history clearing

Click the [Clear All]] button.

All event histories are deleted.

9.2 Network Diagnostics

The status of various networks can be diagnosed.

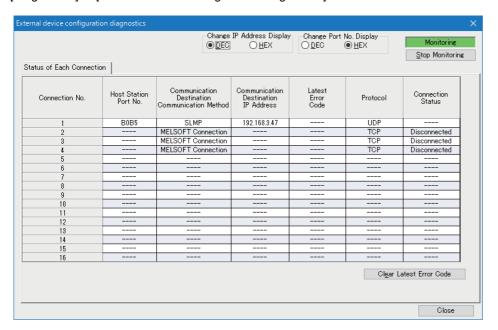
External device configuration diagnostics

The communication status between the Ethernet port (CH1) of a MELIPC and a target device connected over virtual Ethernet can be monitored.

For details on the external device configuration diagnostics function, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Window

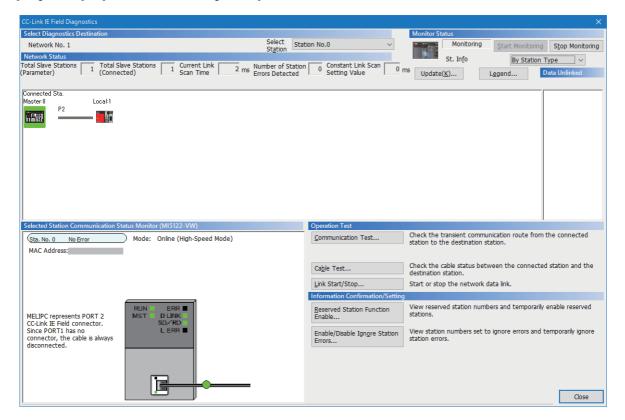


CC-Link IE Field Network diagnostic

The following are performed: monitoring the network information, diagnosing the network status, and testing the network. For details on the CC-Link IE field network diagnosis, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Window

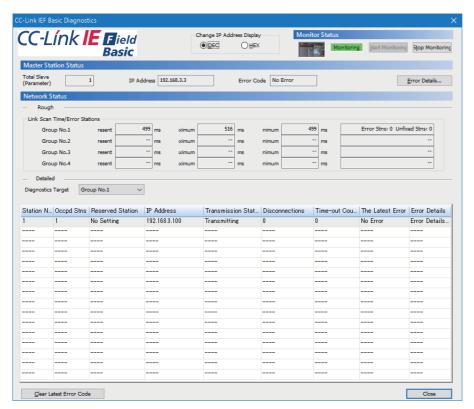


CC-Link IE Field Network Basic diagnostic

The following are performed: monitoring the network information, diagnosing the network status, and testing the network. For details on the CC-Link IE Field Network Basic diagnostics, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Window



10 CHANGING MELIPC OPERATION

The operation status of a MELIPC can be changed from MI Configurator.

Purpose	Function	Reference
To set the clock on the VxWorks part of a MELIPC.	Clock setting	≅ Page 61 Clock Setting
To change the operating status of a MELIPC.	Remote operation	☐ Page 62 Remote Operation
To check the usage status of the user drive, and to clear and initialize values.	MELIPC memory operation	Page 63 Memory Operation



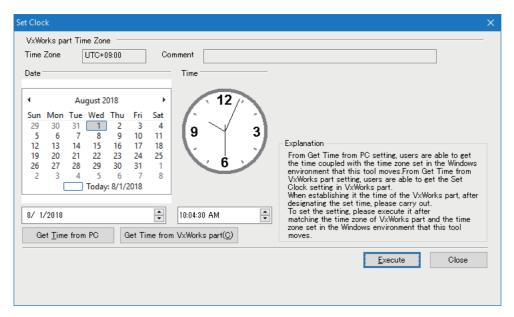
If MI Configurator is not logged on to a MELIPC, a screen to logon to a MELIPC may appear. Enter a user name and password to logon to the MELIPC. (Page 52 User Authentication Function)

10.1 Clock Setting

The time on the VxWorks part of a MELIPC can be set.

Window

[Online] ⇒ [Set Clock]



Displayed items

Item		Description	
Time Zone		Obtains the time zone set on the VxWorks part of the MELIPC and displays the time. During daylight saving time and the daylight saving time setting is enabled, summer time is considered, and therefore the time zone is one hour in advance of the time set for the VxWorks part. If parameters have not been set in the VxWorks part, the MELIPC operates with the factory settings (UTC+9).	
Comment		Obtains the comment that was set for the VxWorks part of the MELIPC, and displays it in the screen.	
Date	_	Displays a date to be set for the VxWorks part. In the "Clock Setting" screen, the date that was set for the VxWorks part is displayed.	
	Today: DD/MM/YYYY	Displays the date on the VxWorks part or personal computer where MI Configurator is installed. The date is changed by clicking the [Get Time from PC] or [Get Time from VxWorks] button. By clicking "Today: DD (day)/MM (month)/ YYYY (year)" in the calendar, the date is changed to the one on the VxWorks part or personal computer where MI Configurator is installed.	
Time		Displays time to be set for the VxWorks part. In the "Clock Setting" screen, the time that was set for the VxWorks part is displayed.	
[Get Time from PC] button		Obtains the time on a personal computer where MI Configurator is installed.	
[Get Time from VxWorks] button		Obtains the time on the VxWorks part of the MELIPC to which this product is connected.	

Operating procedure

- 1. Specify a date and time to be set for the VxWorks part of the MELIPC in "Date" and "Time".
- 2. Click the [Execute] button.

10.2 Remote Operation

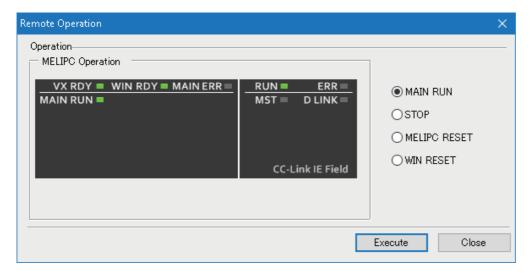
The operating status of a MELIPC can be changed.

For details on remote operations, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Window

[Online] ⇒ [Remote Operation]





The status of a dot-matrix LED is not displayed in "MELIPC Operation Status".

Precautions

The following operations cannot be performed when MI Configurator is installed on the Windows part of a MELIPC.

- MELIPC RESET
- WIN RESET

10.3 Memory Operation

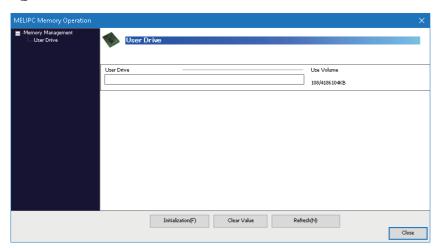
The status of the user drive in MELIPC built-in memory can be checked and values can be cleared.

Checking memory usage

The following shows the method for checking the usage status of the user drive.

Window

[Online] ⇒ [MELIPC Memory Operation]



Initializing/clearing memory

The following shows the methods for initializing memory and clearing values.

For details on the initialization of the user drive, refer to the following manual.

MELIPC MI5000 Series User's Manual (Application)

Initializing memory

Delete the folders and files stored in the user drive of a MELIPC.

Operating procedure

- **1.** Select [Online] ⇒ [MELIPC Memory Operation].
- 2. Click the [Initialization] button in the "MELIPC Memory Operation" screen.

Clearing values

Clear the values of devices and file registers.

Operating procedure

- **1.** Select [Online] ⇒ [MELIPC Memory Operation].
- 2. Click the [Clear Value] button in the "MELIPC Memory Operation" screen.
- 3. Set each item on the "Clear Value" screen, and click the [Execute] button.

APPENDIX

Appendix 1 Unsupported Character Strings

Character strings used for application function names, common instruction names, special instruction names, instructions and so on are referred to as the reserved words.

These reserved words cannot be used for data names.

When the character strings defined as reserved words is used for data names, an error occurs at the registration or conversion.

Category	Character string
Symbol	(blank), !, ", #, \$, %, ', *, &, +, ,, ., /, :, ;, <, =, >, ?, @, [,], ^, `, {, , }, ~
Windows reserved word	COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9, AUX, CON, PRN, NUL, CLOCK\$, END_MARK
Data type reserved words	VAR, VAR_RETAIN, VAR_ACCESS, VAR_CONSTANT, VAR_INPUT, VAR_INPUT_RETAIN, VAR_OUTPUT, VAR_OUTPUT_RETAIN, VAR_IN_OUT, VAR_IN_EXT, VAR_EXTERNAL, VAR_EXTERNAL_CONSTANT, VAR_EXTERNAL_RETAIN, VAR_GLOBAL, VAR_GLOBAL_CONSTANT, VAR_GLOBAL_RETAIN, VAR_PUBLIC, VAR_PUBLIC_RETAIN, BOOL, BYTE, INT, SINT, DINT, LINT, UINT, USINT, UDINT, ULINT, WORD, DWORD, LWORD, ARRAY, REAL, LREAL, TIME, STRING, WSTRING, TIMER, LTIMER, RETENTIVETIMER, LRETENTIVETIMER, COUNTER, LCOUNTER, POINTER, ANY, ANY_NUM, ANY_BIT, ANY_REAL, ANY_INT, ANY_DATE, ANY_SIMPLE, ANY16, ANY32, DATE_AND_TIME, DT, TIME, TIME_OF_DAY, TOD, BODY_CCE, BODY_FBD, BODY_IL, BODY_LD, BODY_SFC, BODY_ST, END_BODY, END_PARAMETER_SECTION, PARAM_FILE_PATH, PARAMETER_SECTION, POW, LONGCOUNTER, LONGRETENTIVETIMER, LONGTIMER, Unknown, ANY_BITADDR, ANY_WORDADDR, ANY_STRING, ANYSTRING_SINGLE, ANYSTRING_DOUBLE, ANY_ELEMENTARY, ANY_ELEMENTARY_IEC, ANY_MAGNITUDE, ANY_BOOL, ANY_SIGNED, ANY_UNSIGNED, ANYREAL_64, ANYREAL_32, ANY_DERIVED, ANY16_S, ANY16_U, ANY32_S, ANY32_U, ANY64_A, ANY64_S, ANY64_U, ANY_STRUCT, ANYWORD_ARRAY, ANY16_ARRAY, ANY16_S_ARRAY, ANY16_U_ARRAY, ANY32_ARRAY, ANY32_S_RRAY, ANY32_U_ARRAY, ANY64_ARRAY, ANY64_S_ARRAY, ANYSTRING_SINGLE_ARRAY, ANYSTRING_DOUBLE_ARRAY, ANY_REAL_64_ARRAY, ANY_STRING_ARRAY, ANYSTRING_SINGLE_ARRAY, ANYSTRING_DOUBLE_ARRAY, ANYBIT_ARRAY, UINT_WORD, UDINT_DWORD, ULINT_LWORD, TIME2, KBIT64, KBIT32, KBIT16, WDEVICE, BDEVICE, DUMMYDEVICE, FB, FUN, STRUCT_MEMBER, BIT_ARRAY, STRUCT_ARRAY, STRING_ARRAY, WSTRING_ARRAY, LINT_ARRAY, ULINT_LWORD_ARRAY, DINT_ARRAY, UDINT_DWORD_ARRAY, INT_ARRAY, DINT_ARRAY, UDINT_ARRAY, UNINT_LWORD_ARRAY, INT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, DINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, DINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, UDINT_ARRAY, DONE, ANY16_OR_STRING_SINGLE, ANY_DT, ANY_TM
IEC reserved word	NOT, MOD, LD, LDN, ST, STN, S, S1, R, R1, AND, ANDN, OR, ORN, XOR, XORN, ADD, SUB, MUL, DIV, GT, GE, EQ, NE, LE, LT, JMP, JMPC, JMPCN, CAL, CALC, CALN, RET, RETC, RETN, LDI, LDP, LDF, ANI, ANDP, ANDF, ANB, ORI, ORP, ORF, ORB, MPS, MRD, MPP, INV, MEP, MEF, EGP, EGF, OUT, OUTH, SET, RST, PLS, PLF, FF, DELTA, DELTAP, SFT, SFTP, MC, MCR, STOP, PAGE, NOP, NOPLF, RETURN, IF, THEN, ELSE, ELSIF, END_IF, CASE, OF, END_CASE, FOR, TO, BY, DO, END_FOR, WHILE, END_WHILE, REPEAT, UNTIL, END_REPEAT, EXIT, TYPE, END_TYPE, STRUCT, END_STRUCT, RETAIN, END_VAR, FUNCTION, END_FUNCTION, FUNCTION_BLOCK, END_FUNCTION_BLOCK, STEP, INITIAL_STEP, END_STEP, TRANSITION, END_TRANSITION, FROM, UNTILWHILE, ACTION, END_ACTION, CONFIGURATION, END_CONFIGURATION, CONSTANT, F_EDGE, R_EDGE, AT, PROGRAM, WITH, END_PROGRAM, READ_ONLY, READ_WRITE, RESOURCE, END_RESOURCE, ON, TASK, EN, ENO, SINGLE, TRUE, FALSE, INTERVAL
Character string recognized as a device (Device name + numerals)	X0, etc.
Others	Manufacturer-defined FB/FUN, MELSEC instructions

Precautions

Names are not case-sensitive.

Appendix 2 Installation Procedure of .Net Framework 3.5

This section shows the procedure for installing .Net Framework 3.5.

In a network-accessible environment

The following shows the installation procedure when the personal computer is connected to the network and Windows Update is available.



For Windows 10

- **1.** Select [Settings] ⇒ [Apps] ⇒ [Programs and Features] ⇒ [Turn Windows features on or off] from Windows Start menu.
- 2. Select the checkbox of ".NET Framework 3.5 (including .NET 2.0 and 3.0)", and click the [OK] button.
- Select "Download files from Windows Update".

.NET Framework 3.5 is installed and it is available.



If .Net Framework 3.5 cannot be installed in a network-accessible environment, attempt the installation procedure for the network-inaccessible environment.

In a network-inaccessible environment

The following shows the installation procedure when the personal computer is not connected to the network and Windows Update is unavailable.



For Windows 10

- 1. Insert a Windows 10 installation media to the DVD-ROM.
- 2. Run the command prompt as administrator.
- **3.** Run the following command in the command prompt.
- dism /online /enable-feature /featurename:NetFX3 /all /Source:□*1:\sources\sxs\ /limitaccess

.NET Framework 3.5 is installed and it is available.

Appendix 3 TROUBLESHOOTING

This section shows the errors which may occur when using MI Configurator and their corrective actions.

Symptom	Check point	Corrective action	
Contents in the screen may not be displayed properly. (For example, overlapping of icons, text overflowing from the flame of a button, missing checkboxes, etc.)	Is the size of the text and/or other items in the screen changed to a value other than the default value (such as 96 DPI, 100%, and 9 pt) in Windows settings?	 Change the size of the text and/or other items on the screen to the default (such as 96 DPI, 100%, and 9 pt). For Windows 10 (version 1703 or later)*1, the display of MI Configurator can be displayed with high DPI scaling by using a Windows 10 function.*2 Select MIConfig.exe*3, then select [Properties] in the right-click menu. Select "Override high DPI scaling behavior. Scaling performed by:" in the [Compatibility] tab, then select "System" from the pull-down list. Click the [OK] button. 	
This product, which is installed on the Windows part of a MELIPC,	Is communication unable due to the freeze of the VxWorks part?	Reset the system of the MELIPC.	
cannot be connected to the VxWorks part of the MELIPC.	Is the IP address of the virtual Ethernet on the Windows part changed?	Change the IP address of the virtual Ethernet on the Windows part as follows: IP address: 172.16.0.2 Subnet mask: 255.240.0.0 Default gateway: (blank)	
	Is '61470' that is used for a virtual Ethernet connection (a dedicated line for MI Configurator) set for the port number of the SLMP-compatible device in the external device configuration?	Change the port number of the SLMP-compatible device by following the proce below. ① Connect the Ethernet port (CH1) and Ethernet port (CH2) on the MELIP with LAN cable, or connect an external personal computer and Ethernet port (CH1) of MELIPC with a LAN cable. ② Connect the target by specifying the IP address assigned to the Ethernet port (CH1) in the Ethernet connection in the "Specify Connection Destination" scree ③ Change the port number of the SLMP-compatible device to the number other '61470' (within 1 to 4999 or 5010 to 65534) in [Basic Parameter] ➡ [External Decoperate Settings] ➡ [External Device Configuration] ➡ [Detail Setting]. ④ Write the basic parameters to the MELIPC, and restart the MELIPC.	
MI Configurator cannot access a file in the user drive of the VxWorks part of the MELIPC.	Is the SHUTDOWN button on the MELIPC pressed to shut down the VxWorks part?	Restart the MELIPC.	
	Is the C Controller module dedicated function (CCPU_ShutdownROM) executed to shut down the VxWorks part?		
'The executed function is not supported.' appears and MELIPC or Windows cannot be restarted.	Is GOT transparent function used in the connection destination setting?	Press the [SHUTDOWN] button on the MELIPC to turn the power OFF and ON. Log in to the Windows part of the MELIPC, and restart the MELIPC.	
MELIPC series products on the network cannot be found.	Is there a response within a response waiting time?	Extend the response waiting time and search the MELIPC series product again.	
	Are MELPICs connected via a router?	MELIPCs connected via a router cannot be found. To search them, change the connection route.	
	Is the subnet mask correct?	Set the subnet mask so that it matches with the one used for MELIPCs.	
	Is "Response Setting of MELIPC Search" set as "Do Not Respond" in the Basic Parameter?	Change the setting to "Respond" in the "Response Setting of MELIPC Search" of the Basic Parameter.	
	Are there multiple network interfaces? Is the priority of the network interface connected to the MELIPC lower than that of other network interfaces?	Open the property of the network interface connected to the MELIPC, and set '1' for the interface metric in the advanced TCP/IP settings. By this setting, MELIPCs can be searched. (FF Page 68 Setting an interface metric)	
MI Configurator does not start.	Were other MELSOFT products deleted in a batch using the MELSOFT deletion tool?	MI Configurator uses common PlatForm with other MELSOFT products; therefore, when the MELSOFT deletion tool was used for deleting other MELSOFT products, install MI Configurator again using the installer.	
An application error or insufficient memory error occurs at the startup of MI Configurator in the	Is the free space in the memory required for the startup of MI Configurator sufficient?	End all applications, increase the available memory capacity, and start MI Configurator.	
case when available memory area is 170 MB or lower.	Is the file or environment required for the startup of MI Configurator corrupted?	Setup MI Configurator again using the installer.	

Symptom	Check point	Corrective action
When installing MI Configurator, .NET Framework 4.0 is installed at the same time and the personal computer is restarted. After the restart of the personal computer, restarting of the personal computer is prompted again and unable to install MI Configurator. Restarting the personal computer again and again does not solve this problem.	Was MI Configurator installed as the user with the administrator authority?	.NET Framework 4.0 must be installed with the administrator authority. Install MI Configurator again with a user with the administrator authority.
When installing MI Configurator, a message that indicates .NET Framework 3.5 (including .NET 2.0 and 3.0) is enabled appears and unable to install.	ls .NET Framework 3.5 (including .NET 2.0 and 3.0) enabled?	Enable .NET Framework 3.5 (including .NET 2.0 and 3.0), and then install MI Configurator again. (Page 66 Installation Procedure of .Net Framework 3.5)

- *1 Windows version can be checked with the following procedure.
 - **1** Press the Windows key + ℝ, or select [Windows System] ⇒ [Run] from the Start menu of Windows.
 - 2 Enter 'winver' in the "Run" screen.
 - 3 Check the version in the displayed screen.
- *2 The display of MI Configurator will be blurred by enlarging.

The following lists the setting values for "Change the size of text, apps, and other items" and the recommended display resolution for each setting value in Windows 10.

Setting value: 100%, display resolution: 1024×768 dots or more Setting value: 125%, display resolution: 1900×1200 dots or more Setting value: 150%, display resolution: 1900×1200 dots or more Setting value: 175%, display resolution: 2880×1620 dots or more Setting value: 200%, display resolution: 2880×1620 dots or more Setting value: 225%, display resolution: 3840×2160 dots or more Setting value: 250%, display resolution: 3840×2160 dots or more

*3 'MIConfig.exe' is stored in the folder where MI Configurator is installed.

The following is an example of a storage location.

64-bit version operating system: C:\Program Files (x86)\MELSOFT\MICONF\MICOnfig.exe

32-bit version operating system: C:\Program Files\MELSOFT\MICONF\MIConfig.exe

Setting an interface metric

The following shows the method for setting an interface metric.



For Windows 7

- **1.** Select [Control Panel] ⇒ [Network and Internet] ⇒ [Network and Sharing Center] ⇒ [Change adapter settings] from Windows Start.
- **2.** Select and right-click the network connection that is connected to the MELIPC, and select [Properties] in the shortcut menu.
- 3. Select "Internet Protocol Version 4 (TCP/IPv4)", and click the [Properties] button in the property screen of the network connection.
- 4. Click the [Advanced] button in the [General] tab in the "Internet Protocol Version 4 (TCP/IPv4) Properties" screen.
- 5. Unselect "Automatic metric" in the [IP Settings] tab in the "Advanced TCP/IP Settings" screen.
- **6.** Set '1' for "Interface metric".

Appendix 4 Using a Project in a Different Version

This section explains the considerations for using a project in a different version of MI Configurator from the one with which the project was created.

Note the following contents to use a project.

Using a project in an earlier version

■ Using a project, which was created in version 1.004E or later, in version 1.003D or earlier

Function	Considerations
Opening a project Reading data from a MELIPC	When a project is opened/read in version 1.003D or earlier, the parameters which are not supported in version 1.003D or earlier will be discarded .
Project verification Verification with data in a MELIPC	When a project is verified in version 1.003D or earlier, the parameters which are not supported in version 1.003D or earlier cannot be verified.

Appendix 5 Additions and Changes from Previous Version

The following table shows the added/changed main functions with a version upgrade.

Supported version	Added/changed main function	Description	Reference
Version 1.004E	Basic Parameter	The following item is added to the basic parameters.*1 • Windows part Startup Monitoring Setting	☐ Page 33 Basic Parameters

^{*1} To use this function, it is required that MELIPC supports the function. For information on the firmware version of the supported MELIPC, refer to the following:

MELIPC MI5000 Series User's Manual (Application)

ï

INDEX

C
Changing current value
D
Display language
E
Ethernet connection
I
Initialization 64
М
Monitoring status
0
Other station setting
Т
Toolbar
v
Virtual Ethernet connection
W
Window operation 16

MEMO

REVISIONS

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

Revision date	*Manual number	Description
May 2018	SH(NA)-081938ENG-A	First edition
May 2018	SH(NA)-081938ENG-B	Partial correction
September 2018	SH(NA)-081938ENG-C	■Added or modified parts Section 10.1, Appendix 2
August 2019	SH(NA)-081938ENG-D	■Added or modified parts Appendix 4, Appendix 5
April 2022	SH(NA)-081938ENG-E	■Added or modified parts SAFETY PRECAUTIONS, Section 1.3

Japanese manual number: SH-081937-F

This manual confers no industrial property rights or any rights of any other kind, nor does it confer any patent licenses. Mitsubishi Electric Corporation cannot be held responsible for any problems involving industrial property rights which may occur as a result of using the contents noted in this manual.

© 2018 MITSUBISHI ELECTRIC CORPORATION

TRADEMARKS

Microsoft and Windows are trademarks of the Microsoft group of companies.

The company names, system names and product names mentioned in this manual are either registered trademarks or trademarks of their respective companies.

In some cases, trademark symbols such as '™, or '®, are not specified in this manual.

SH(NA)-081938ENG-E(2204) MODEL:SW1DNN-MICONF-O-E

MITSUBISHI ELECTRIC CORPORATION

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

When exported from Japan, this manual does not require application to the Ministry of Economy, Trade and Industry for service transaction permission.

Specifications subject to change without notice.