# **Data File Manager**

**User's Manual** 

# **Revision history**

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## **Preface**

This manual describes Data File Manager.

Please read this manual carefully and ensure that you fully understand the functions and performance of the Data File Manager software.

# **Symbols Used in this Manual**

This manual uses the following symbols to facilitate explanation.

#### **Symbols**



Information that requires special attention. Failure to operate the product in accordance with the information provided can lead to serious injury or damage.



.... Information relating to requests or material to reference in the use of a function



..... Useful information relating to a function

OK

. Screen buttons are indicated by **bold** text or by using the actual graphic icon.

SHIFT

Keyboard keys are indicated by the keyboard inscription in capital letters.

\*\*\*\*

..... Controls are indicated by **bold** text.

# Abbreviations, Generic Terms, and Terminology Used in this Manual

Item	Description
Device Address	Memory that is capable of storing values in unit of bits or words loaded on MICROSmart, SmartAXIS Pro/Lite, MICRO/I and external device.
WindO/I-NV4	Integrated configuration software application for creating projects of MICRO/I.
WindLDR	WindLDR is a programming software to make ladder program or function block diagram for MICROSmart or SmartAXIS Pro/Lite.
Project	Data including image data required for operating MICRO/I, which is created with WindO/I-NV4.
ZNV Project File	You can make this file by using the download function in WindO/I-NV4 configuration software or the upload function in Data File Manager. The file extension is ".znv".
ZLD Project File	ZLD Project File is a file contains user program (ladder program or function block diagram) for MICROSmart or SmartAXIS Pro/Lite made with WindLDR ladder logic software. The file extension is ".zld".
External Memory Device	The generic term for an SD memory card and a USB flash drive.

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# **Chapter 1 Data File Manager Features & Basic Operations**

This chapter describes the correspondence models, functions and how to start and exit Data File Manager.

# 1 Overview

# 1.1 Supported models

Supported IDEC's PLCs and operator interfaces are as follows.

Designation on Data File Manager	Series Name	Abbreviation	Type Number
	MICROSmart	FC6A	FC6A-C16X1XE, FC6A-C24X1XE, FC6A-C40X1XE, FC6A-C40X1XEJ, FC6A-D16X1CEE, FC6A-D32X3CEE
PLC		FC5A	FC5A-C10R2X, FC5A-C16R2X, FC5A-C24R2X, FC5A-D16RX1, FC5A-D32X3, FC5A-D12X1E
		FC4A	FC4A-C10R2X, FC4A-C16R2X, FC4A-C24R2X, FC4A-D20X3, FC4A-D20RX1, FC4A-D40X3
	SmartAXIS Pro/Lite	FT1A	FT1A-12, FT1A-24, FT1A-40, FT1A-48
	MICRO/I	HG5G/4G/3G-V	HG5G-VFXT22MF-B, HG4G-VCXT22MF-B, HG3G-V*XT22MF-*
		HG2G-V	HG2G-V5FT22TF-*
		HG2G-5T	HG2G-5T*22TF-*
HMI		HG1G	HG1G-4VT22TF-*
		HG1P	HG1P-ST32*
		HG4G/3G	HG4G-CJT22*F-B?HG3G-*JT22*F-*
		HG2G-5F	HG2G-5FT22TF-*

# 1.2 What Can Be Done Using Data File Manager

The following functions are available on Data File Manager.

Function		CROSm	art	SmartAXIS Pro/Lite	MICRO/I	
	FC6A	FC5A	FC4A	FT1A		
Changing the operating status of the PLC	Yes	Yes	Yes	Yes	No	
Downloading or Uploading the ZLD Project File (.zld)	Yes	Yes	Yes	Yes	No	
Downloading or Uploading the ZNV Project File $(.znv)^{*1}$	No	No	No	No	Yes	
Downloading the system software	Yes	Yes	Yes	Yes	Yes	
Downloading files and folders to the external memory device	Yes	No	No	No	Yes	
Uploading files and folders from the external memory device	Yes	No	No	Yes	Yes	
Downloading or Uploading the values of device addresses	Yes	Yes*2	No	Yes	Yes	
Deleting data from the internal memory or the external memory device	Yes*3	Yes*3	Yes*3	Yes*3	Yes	
Formatting the external memory device	Yes	No	No	Yes	Yes	
Displaying or operating files and folders in the external memory device	Yes	No	No	Yes*4	Yes	
Displaying the status or the system information	Yes	Yes	Yes	Yes	Yes	
Displaying the operation logs	Yes	No	No	Yes	Yes	

<sup>\*1</sup> Project created by the WindO/I-NV4 only

<sup>\*2</sup> FC5A-D12X1E only

<sup>\*3</sup> The internal memory only

<sup>\*4</sup> Only displaying, deleting, and uploading files and folders

# **2 Starting and Exiting Data File Manager**

## 2.1 Starting Data File Manager

- 1 Starts Data File Manager with the following procedures.
- Windows 10
- Windows 8
- On the **Start** screen tiles, click **Data File Manager**.
- Click Start, click Programs, click Automation Organizer V2, click Utility, click Data File Manager, and then click Data File Manager.

Click Start, click All Apps, click Automation Organizer V2, and then click Data File Manager.

The **Connection Settings** dialog box is displayed.



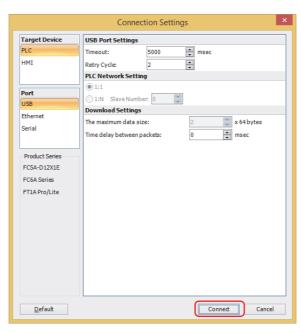
■ Windows 7

You can also start Data File Manager by double-clicking Data File Manager icon on the desktop.

- 2 Selects the **Target Device** from **PLC** or **HMI**.
- **3** Selects the **Port** from the following.

USB, Ethernet, Serial\*1

- 4 Change the settings as necessary.
- 5 Click Connect.

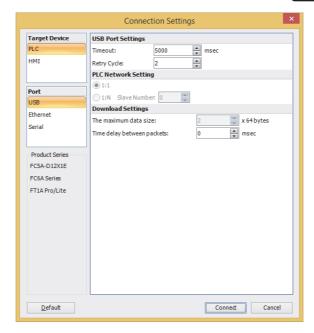


Open the main window of the Data File Manager, and then the status or the system information of the target device is displayed.

<sup>\*1</sup> This option can only be configured when **PLC** is selected for **Target Device**.

## Connection Settings Dialog Box

## FC6A FC5A FC4A FT1A MICRO/I



#### Target Device

Selects the target device from the following.

PLC: Communicates with the PLC.

HMI: Communicates with the operator interface.

#### Port

Selects the communication port on a computer from the following.

USB: Connect the USB port on a computer to the USB interface on the target device.

Ethernet: Connect the Ethernet port on a computer to the Ethernet interface on the target device.

Serial: Connect the serial port on a computer to the serial interface on the target device.

This option can only be set when **PLC** is selected as **Target Device**.



When the **Serial** is selected for the communication port, an external memory device inserted in the target device cannot be accessed.

However, when **Use Bluetooth communication** is selected, an external memory device inserted in the target device can be accessed.

#### USB Port Settings

This option can only be set when **USB** is selected as **Port**.

Timeout: Specifies the time to wait for a response from the target device as (5000 to 32767 ms units).

Retry Cycles: Specifies the number of times to execute a reconnection when the target device cannot communicate

with the external device. When the number of reconnect attempts reaches the number of times set

here, a communication error is displayed.

#### Ethernet Port Settings

This option can only be set when **Ethernet** is selected as **Port**.

IP Address: Displays the IP address of the target device. Click **Browse** to display the **Target IP Address List** 

dialog box, and then specifies the IP address for the target device. For details, refer to "Target IP Address List Dialog Box for PLC" on page 1-6 or "Target IP Address List Dialog Box for HMI" on page 1-7.

Port Number: Specifies the port number for the target device (0 to 65535).

This option can only be set when **PLC** is selected as **Target Device**.

Timeout: Specifies the time to wait for a response from the target device. The time that can be set varies based

on the **Target Device**.

PLC: 3,000 to 30,000 milliseconds

HMI: 0 to 20 minutes

Retry Cycles: Specifies the number of times (1 to 3) to reconnect when Data File Manager cannot communicate

with the target device. When the number of reconnect attempts reaches the number of times set

here, a communication error is displayed.

#### Serial Port Setting

This option can only be set when **Serial** is selected as **Port**.

Port: Selects the serial interface connected to the target device from **COM 1** to **COM 256**.

Baud Rate: Selects the communication speed with the target device from the following.

1200 bps, 2400 bps, 4800 bps, 9600 bps, 19200 bps, 38400 bps, 57600 bps, 115200 bps

Data Bits: Selects the data length as **7 bits** or **8 bits**.

Parity Selects the parity from the following.

None, Odd, Even

Stop Bits: Selects the stop bits as **1 bit** or **2 bits**.

Timeout: Specify the time to wait for a response from the target device (100 to 32767 ms units).

Retry Cycles: Specifies the number of times (1 to 3) to reconnect when Data File Manager cannot

communicate with the target device. When the number of reconnect attempts reaches the

number of times set here, a communication error is displayed.

Automatic Detection: Detects automatically the communication settings of the target device via the serial port.

#### PLC Network Setting

This option can only be set when **PLC** is selected as **Target Device**.

1:1: Communicates with a single target device.

1:N: Communicates with a specified target device when there are multiple PLCs on the same network.

Slave Number: Specifies the network number (0 to 31) of the target device which set on **Function Area** 

**Settings** in WindLDR. The values that can be set only when **Port** is selected **Serial**.

#### Download Settings

This option can only be set when **PLC** is selected as the **Target Device**.

The maximum data size: Specifies the maximum size of the communication packets (1 to 64 (64 bytes units)).

Adjust this size if the remote device does not have enough communication buffer.

Time delay between packets: Specifies the communication interval between the communication packets (0 to 3000

ms units). Adjust this interval if Data File Manager sends communication packets to the

remote device too fast.

#### Communication Option

This option can only be set when PLC is selected as Target Device and Serial Port is selected.

User Bluetooth communication: Select this check box to communicate with the target device over Bluetooth

communication.

For steps to use Bluetooth communication, refer to chapter 9 "BLUETOOTH COMMUNICATION" in the "FC6A Series MICROSmart Communication Manual".

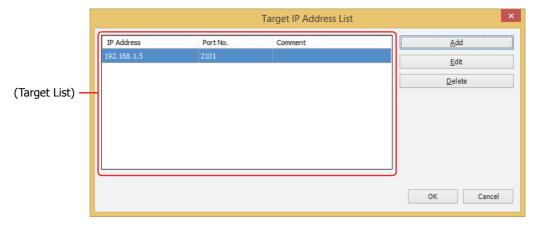
#### Default

Returns the configured values to their default values.

## Target IP Address List Dialog Box for PLC



The Ethernet settings for the target device is collectively managed on the Target IP Address List.



## (Target List)

IP Address: Displays the IP address of the target device.

Port Number: Displays the port number of the target device.

Comment: Displays the comment of the target device.

#### Add

Adds a target information to the (**Target List**). Click this button to open the **Target IP Address Settings** dialog box.

### Edit

Changes the settings of the (**Target List**). Selects a target from the (**Target List**), and then click this button to open the **Target IP Address Settings** dialog box.

#### Delete

Deletes the selected settings from the (Target List).

## **Target IP Address Settings Dialog Box**

Specifies the IP address of the target device used for communication.



#### IP Address

Specifies the IP address of the target device. The format is "xxx.xxx.xxx.xxx". "xxx" stands for a numeric value from 0 to 255.

## Port Number

Specifies the port number for the target device (0 to 65535).

## Comment

Enter a comment for the IP Address. The maximum number is 80 characters.

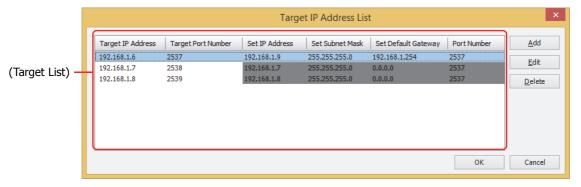
#### Default

Returns the configured values to their default values.

## Target IP Address List Dialog Box for HMI

FC6A FC5A FC4A FT1A MICRO/I

The Ethernet settings for the target device is collectively managed on the Target IP Address List.



#### (Target List)

Target IP Address: Displays the current IP address that has been set in the target device.

Target Port Number: Displays the current port number that has been configured in the target device.

Set IP Address: Displays the IP address which is configured in the target device after downloading the ZNV

Project File.

Set Subnet Mask: Displays the subnet mask which is configured in the target device after downloading the ZNV

Project File.

Set Default Gateway: Displays the default gateway which is configured in the target device after downloading the

ZNV Project File.

Port Number: Displays the port number which is configured in the target device after downloading the ZNV

Project File.

#### Add

Adds a target information to the (**Target List**). Click this button to open the **Target IP Address Settings** dialog box. On this dialog box, specify the Ethernet settings for the target device.

#### Edit

Changes the settings of the (**Target List**).

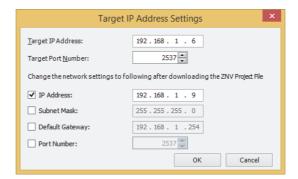
Selects a target from the (**Target List**), and then click this button to open the **Target IP Address Settings** dialog box. On this dialog box, change the Ethernet settings for the target device.

#### Delete

Deletes the selected target from the (**Target List**).

## **Target IP Address Settings Dialog Box**

Specifies the IP address of the target device used for communication.



## ■ Target IP Address

Specify the IP address for the target device. The format is "xxx.xxx.xxx.xxx". "xxx" stands for a numeric value from 0 to 255.

#### ■ Target Port Number

Specify the port number for the target device.

## ■ Change the network settings to following after downloading the ZNV Project File

Select the check boxes to change the Ethernet settings of the target device after downloading the ZNV Project File. The format of the **IP Address**, **Subnet Mask** and **Default Gateway** is "xxx.xxx.xxx.xxx". "xxx" stands for a numeric value from 0 to 255.

IP Address: Enter the IP address which is configured in the target device after downloading the ZNV Project

File.

Subnet Mask: Enter the subnet mask which is configured in the target device after downloading the ZNV Project

File.

Default Gateway: Enter the default gateway which is configured in the target device after downloading the ZNV

Project File.

Port Number: Enter the TCP port number (1 to 65535) which is configured in the target device after downloading

the ZNV Project File. (Default: 2537)



- Even if the Ethernet settings of the target device are changed by using the Target IP Address Settings
  dialog box when downloading a ZNV Project File, the Ethernet settings in the ZNV Project File are not
  changed.
- To change a port number by using this function, use the runtime system version 4.52 or later contained in the ZNV Project File to download.
- Regarding TCP port number of MICRO/I, note the following points.

The numbers that cannot be used: • 2538 (for pass-through)

• 2101 (for FC4A MICROSmart direct connection pass-through)

Duplicate numbers cannot be configured in the following functions:

- Maintenance communication ( WindO/I-NV4 User's Manual)
- Web server function ( WindO/I-NV4 User's Manual)
- FTP server function ( WindO/I-NV4 User's Manual)
- **TCP Server** is selected for the User Communication ( WindO/I-NV4 User's Manual)
- Modbus as Manufacture and Modbus TCP Server as Communication Driver are selected on the Communication Driver tab

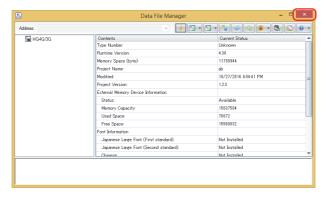
( refer to the WindO/I-NV4 External Device Setup Manual)

 YASKAWA Electric as Manufacture and MP2000(Ethernet) as Communication Driver are selected on the Communication Driver tab

( refer to the WindO/I-NV4 External Device Setup Manual)

## 2.2 Exiting Data File Manager

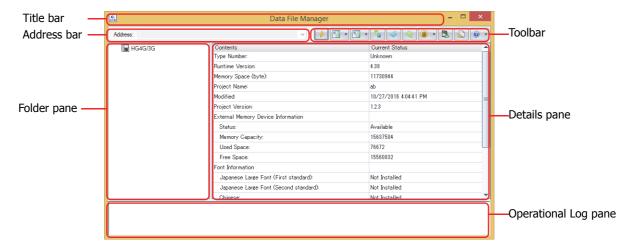
Click in the upper-right corner of Data File Manager. Data File Manager ends.



# 3 Configuration & Functions

## 3.1 Data File Manager Configuration

This section describes the names and functions that make up Data File Manager.



#### Title bar

The title bar shows the name of this software.

#### Address bar

Displays an address of the target device or a folder path of the external memory device inserted in the target device. The displayed content varies based on the target device.

PLC: For details, refer to Chapter 2 "Address bar" on page 2-1 and Chapter 2 "Address bar" on page 2-2.

HMI: For details, refer to Chapter 3 "Address bar" on page 3-1 and Chapter 3 "Address bar" on page 3-2.

#### ■ Toolbar

Display the Data File Manager's functions as buttons. For details, refer to "3.2 Toolbar" on page 1-10.

#### Folder pane

Display the type number, the external memory device and folders.

#### Details pane

Displays the file operational logs which is in the external memory device inserted in the target device, or the files and the folders selected in the

PLC: For details, refer to Chapter 2 "Details pane" on page 2-1 and Chapter 2 "Details pane" on page 2-3.

HMI: For details, refer to Chapter 3 "Details pane" on page 3-1 and Chapter 3 "Details pane" on page 3-3.

## Operational Log pane

Displays the file operational logs. For details, refer to Chapter 2 "2 Display or Operate Files and Folders" on page 2-2.

PLC: For details, refer to Chapter 2 "Operational Log pane" on page 2-3.

HMI: For details, refer to Chapter 3 "Operational Log pane" on page 3-3.

## 3.2 Toolbar

The configuration of the toolbar varies based on the target device.

# PLC

# FC6A FC5A FC4A FT1A MICRO/I

Icon	Icon Command		Description	
<b>*</b>	Connect		nnect Opens the <b>Connection Settings</b> dialog box.	
	Start		Changes the status of the target PLC from stop to run.	Page 2-7
	Stop		Changes the status of the target PLC from run to stop.	Page 2-7
			Downloads the ZLD Project File (.zld) saved in a computer to the target device.	Da
		Download ZLD Project File (.zld)	This is the same as clicking the Download icon.	Page 2-8
•	Download	Download System Software	Downloads the system software to the target PLC.	Page 2-9
		Download Files	Copy from files saved in a computer to the SD memory card inserted in the target PLC.	Page 2-4
		Download Folder	Copy from folders saved in a computer to the SD memory card inserted in the target PLC.	Page 2-5
			Uploads a program in the target PLC to a computer, and saves it as the ZLD Project File (.zld).	Page 2 11
T <sub>G</sub> •	Upload	Upload ZLD Project File (.zld)	This is the same as clicking the Upload icon.	Page 2-11
		Upload Files and Folders	Upload files and folders displayed in the Details pane and save them in a computer.	Page 2-6
<b>~</b>	Refresh		Gets the latest information from the target device, and updates the display.	
<b>4</b>	Download Device Address data (.csv)		Downloads the Device Address Data (.csv) saved in a computer to the target device, and writs values to the device addresses.	Page 2-14
	Upload Dev	vice Address data (.csv)	Gets values of the device addresses from the target device, and saves it as a CSV file in a computer.	Page 2-15
(ii) v	Clear Values of All Device Addresses		Clears the values from device addresses stored in the internal memory of the target device. The target device types are as follows: Inputs, Outputs, Internal Relays, Shift Registers, Data Registers, Expansion data registers, Timer current values, and Counter current values	Page 2-16
		Clear Error	Clears error information stored in the internal memory of the target device.	
	Format SD Memory Card		Formats the SD memory card inserted in the target PLC.	Page 2-17
	Options		Configures the optional feature of the Data File Manager.	Page 1-12
			Displays the Data File Manager help.	
•	Help	Help	This is the same as clicking the Help icon.	
		About Data File Manager	Displays the <b>About Data File Manager</b> .	

## HMI

# FC6A FC5A FC4A FT1A MICRO/I

Icon	n Command		Description	Reference
<b>*</b>	Connect		Opens the <b>Connection Settings</b> dialog box.	Page 1-4
			Downloads the ZNV Project File (.znv) to the target device.	
	Download	Download ZNV Project File (.znv)	This is the same as clicking the Download icon.	Page 3-7
•		Download Files to External Memory Device	Stops the target device and then download files saved in a computer to the external memory device inserted in the target device. The target device resumes running when files have finished downloading.	Page 3-9
		Download Files to External Memory Device while running	Downloads files saved in a computer to the external memory device inserted in the target device without stopping it.	
			Uploads the project from the internal memory of the target device, and saves it as the ZNV Project File (.znv).	Page 2 10
		Upload ZNV Project File (.znv)	This is the same as clicking the Upload icon.	Page 3-10
		Upload All Log Data	Uploads all log data stored in the internal memory of the target device, and saves it to a computer.	
<b>F</b>	Upload	Upload Alarm Log Data	Uploads the Alarm Log data stored in the internal memory of the target device, and saves it to a computer.	Page 3-11
		Upload Data Log Data	Uploads the Data Log data stored in the internal memory of the target device, and saves it to a computer.	ruge 3 11
		Upload Operation Log Data	Uploads the Operation Log data stored in the internal memory of the target device, and saves it to a computer.	
		Upload Files from External Memory Device	Uploads files from the external memory device inserted in the target device, and saves it in a computer.	Page 3-12
<b>~</b>	Refresh		Gets the latest information from the target device, and updates the display.	
<b>4</b>	Download Device Address data (.csv)		Downloads the Device Address Data (.csv) saved in a computer to the target device, and writs values to the device addresses.	
	Upload Dev	Device Address data (.csv)  Gets values of the device addresses from the target device, and saves it as a CSV file in a computer.		Page 3-15
		Clear All data	Clears all of the data stored in the internal memory of the target device.	
		Clear Alarm Log Data	Clears all of the Alarm Log data stored in the internal memory of the target device.	
<b>(ii)</b> •	Clear	Clear Data Log Data	Clears all of the Data Log data stored in the internal memory of the target device.	Page 3-16
	Cicui	Clear Operation Log Data	Clears all of the Operation Log data stored in the internal memory of the target device.	
		Clear Values of All Device Addresses	Clears the values from all device addresses.	
		Clear Files stored in External Memory Device	Clears data saved to the external memory device inserted in the target device.	Page 3-17
	Format External Memory Device		Formats the external memory device inserted in the target device.	Page 3-18
	Options		Configures the optional feature of the Data File Manager.	Page 1-12
			Displays the Data File Manager help.	
•	Help	Help	This is the same as clicking the Help icon.	
		About Data File Manager	Displays the <b>About Data File Manager</b> .	

# 4 Customizing the Data File Manager

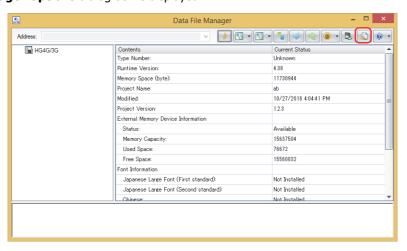
# 4.1 Configure the Optional Feature

You can configure the Data File Manager settings such as the double-click action, and the saving the run history of the command line. The settings configured here are saved even when you exit the Data File Manager.

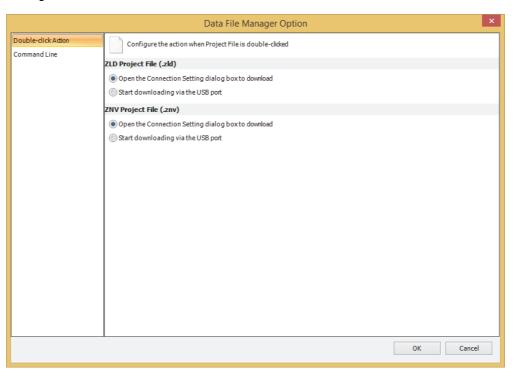
The procedure for configuring the optional feature is shown below.

1 Click (Options) on the toolbar.

The **Data File Manager Options** dialog box is displayed.

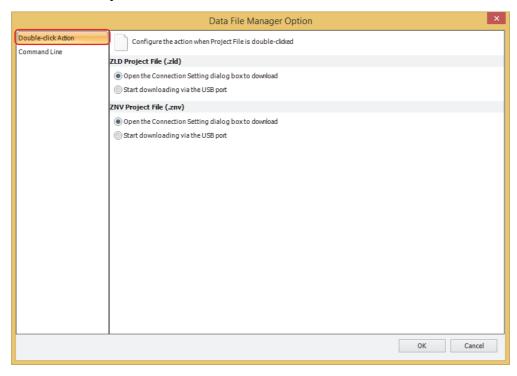


2 Change the settings on each tab as desired.



## Double-click Action Tab

Configure the action when Project File is double-clicked.



#### ZLD Project File (.zld)

Selects the action when a ZLD Project File is double-clicked. The main window of the Data File Manager doesn't open.

Open the Connection Setting dialog box to download:

Opens the Communication Setting dialog box when you double-click a ZLD Project File. And then download it to the target device via the communication port which you specify in this dialog box.

Start downloading via the USB port: After you double-click a ZLD Project File, starts downloading it to the target device via the USB port.

#### ZNV Project File (.znv)

Selects the action when a ZNV Project File is double-clicked. The main window of the Data File Manager doesn't open.

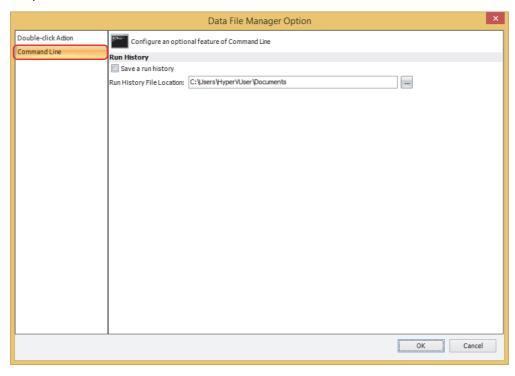
Open the Connection Setting dialog box to download:

Opens the Communication Setting dialog box when you double-click a ZNV Project File. And then download it to the target device via the communication port which you specify in this dialog box.

Start downloading via the USB port: After you double-click a ZNV Project File, starts downloading it to the target device via the USB port.

## Command Line tab

Configures an optional feature of Command Line.



## Run History

Save a run history: Save the description of the executed command line to a run history file.

Run History File Location: Specifiy the save location of the run history file.

Click **Browse** to display the **Browse For Folder** dialog box. This option can only be set

when **Save a run history** is selected.

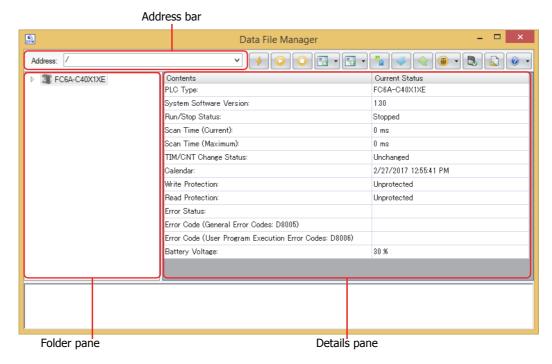
# Chapter 2 Using PLC

This chapter describes how to use the Data File Manager when communicating with the PLC.

# 1 Display Status

FC6A FC5A FC4A FT1A MICRO/I

You can confirm the status of the target device by clicking the type number on the Folder pane.



#### Address bar

The displayed content varies based on the selected communication port.

USB, Serial: / (slash)

Ethernet: IP Address:Port Number

Example: 192.168.1.5:2101/

#### **■** Folder pane

Displays the type number of the target device.

## ■ Details pane

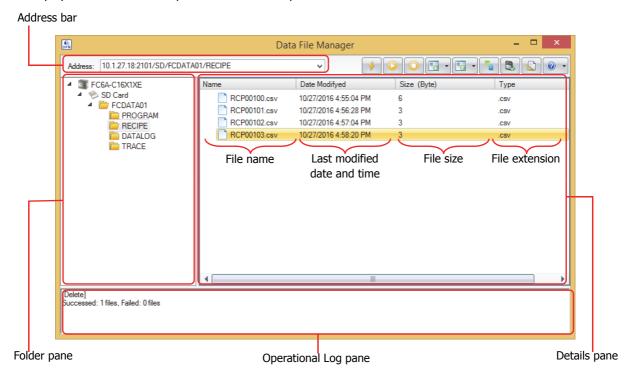
Displays the status of the target device.

# 2 Display or Operate Files and Folders

## 2.1 Display Files and Folders

FC6A FC5A FC4A FT1A MICRO/I

Data File Manager gets the information of files and folders from the SD memory card inserted in the target device<sup>\*1</sup>, and displays them in the Folder pane and the Details pane.



## Address bar

Displays the folder path of the external memory device selected in the Folder pane.

The displayed content varies based on the selected communication port.

USB: external memory device type/folder path

Example: /SD/FCDATA01/

Ethernet: IP address:port number/external memory device type/folder path

Example: 192.168.1.5:2101/SD/FCDATA01/

## Folder pane

Displays the folder structure as a tree. Click a folder to move to the level in that folder (up or down).

1st level (root): Displays the target device as an icon and text.

2nd level: Displays the SD memory card inserted in the target device as an icon and text.

3rd level and lower: Displays the folders in the SD memory card as a tree.

<sup>\*1</sup> Only when under suspension for FT1A

## Details pane

Displays a list of the files and folders in the folder selected on the Folder pane.

You can create a new folder, rename or delete files and folders.



Don't operate a file or a folder during its reading or writing operation by following functions.

- · Recipe function
- Saving log functions such as DLOG instruction or TRACE instruction.
- Creates a new folder Click **Create Folder** on the right click menu.
- Rename a file or folder
  Selects a file or folder, and then click **Rename** on the right click menu or press the **F2** key.
- Deletes files and folders
   Selects files and folders, and then click **Delete** on the right click menu or press the **DELETE** key.

#### Operational Log pane

On the Folder pane or the Details pane, the operational log is displayed by executing the following operations.

Operation	Description	Log format
Download	Displays the number of files that were successfully downloaded and the number of files that failed to be downloaded. For the operating procedures, refer to "2.2 Download Files and Folders" on page 2-4.	[Download] Success: ### file(s), Failed: ### file(s)
Upload	Displays the number of files that were successfully uploaded and the number of files that failed to be uploaded. For the operating procedures, refer to "2.3 Upload Files and Folders" on page 2-6.	[Upload] Success: ### file(s), Failed: ### file(s)
Delete	Displays the number of files that were successfully deleted and the number of files that failed to be deleted. For the operating procedures, refer to the above "Deletes files and folders".	[Delete] Success: ### file(s), Failed: ### file(s)

###: Number of files

## 2.2 Download Files and Folders

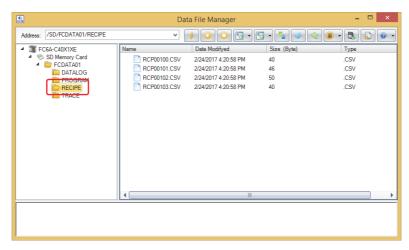
FC6A FC5A FC4A FT1A MICRO/I

Files and folders saved on the computer will be written to the SD memory card inserted in the target device.



Don't download to a folder during its reading or writing operation by following functions.

- · Recipe function
- Saving log functions such as DLOG instruction or TRACE instruction.
- Download Files
- 1 Select download destination folder in folder pane.



2 Click on ▼ to the right of 🔃 (Download), and then click the **Download Files**.

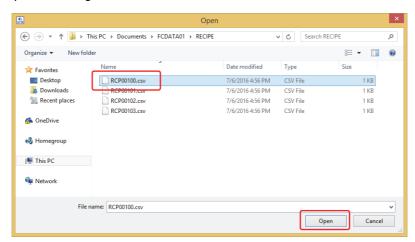
The **Open** dialog box is displayed.

3 Specifies the files to download and click Open.

The download starts.

If there is a file with the same file name in the download destination folder, an overwrite confirmation message is displayed.

- Click **OK** to start downloading the files.
- Click Cancel to stop downloading the files.



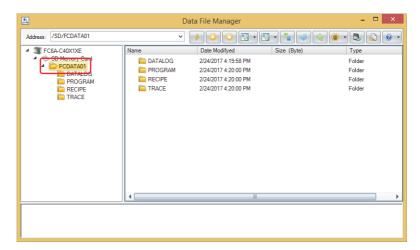
This concludes downloading files.



If files are selected with Explorer on the computer and then dragged and dropped to the details pane, those selected files can be downloaded to the SD memory card inserted in the target device.

## Download Folders

1 Select download destination folder in folder pane.



2 Click on ▼ to the right of 🗔 · (Download), and then click the **Download Folders**.

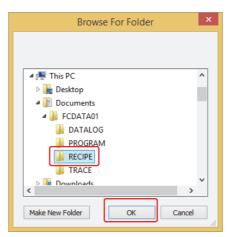
The Browse For Folder dialog box is displayed.

3 Select the folder to download and click **OK**.

The download starts.

If there is a folder with the same folder name in the download destination folder, an overwrite confirmation message is displayed.

- Click **OK** to start downloading the folder.
- Click **Cancel** to stop downloading the folder.



This concludes downloading folders.



If folders are selected with Explorer on the computer and then dragged and dropped to the details pane, those selected folders can be downloaded to the SD memory card inserted in the target device.

## 2.3 Upload Files and Folders

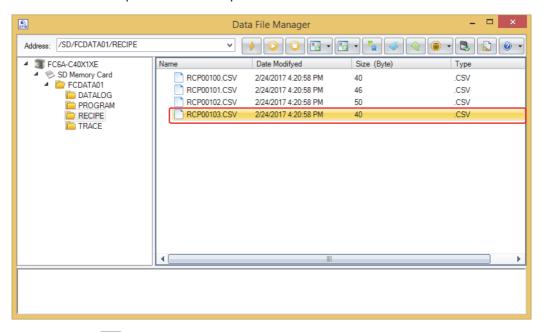
FC6A FC5A FC4A FT1A MICRO/I

Files and folders displayed in the details pane will be saved to the computer.



Don't upload a file or a folder during its reading or writing operation by following functions.

- Recipe function
- Saving log functions such as DLOG instruction or TRACE instruction.
- 1 Select the files and folders to upload in the details pane.



2 Click on ▼ to the right of (Upload), and then click the Upload Files and Folders.

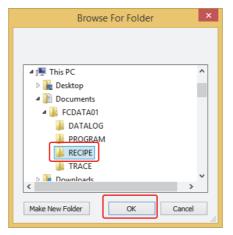
The **Browse For Folder** dialog box is displayed.

3 Enter the destination and the file name and then click **OK**.

The upload starts.

If there is a file or folder with the same file or folder name in the upload folder, an overwrite confirmation message is displayed.

- Click **OK** to start uploading the files and folders.
- Click **Cancel** to stop uploading the files and folders.



This concludes uploading files and folders.



If files and folders are selected in the details pane and then dragged and dropped to Explorer on the computer, those selected files and folders can be uploaded.

# 3 Changing the PLC status

FC6A FC5A FC4A FT1A MICRO/I

## 3.1 Start procedure

The target PLC can be set to run using Data File Manager.

- Click (Start) on the toolbar.
   A confirmation message is displayed.
- 2 Click Yes.



This concludes the start operation.

# 3.2 Stop procedure

The target PLC can be set to stop using Data File Manager.

- Click (Stop) on the toolbar.
   A confirmation message is displayed.
- 2 Click Yes.



This concludes the stop operation.

# 4 Downloading

## 4.1 Download a ZLD Project File

FC6A FC5A FC4A FT1A MICRO/I

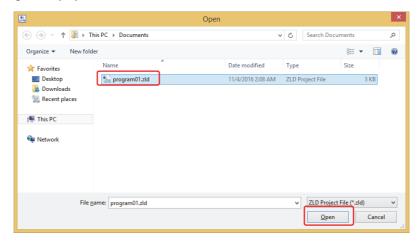
A ZLD Project File (.zld) saved in a computer is downloaded to the target PLC.

1 Click (Download) on the toolbar.

The **Open** dialog box is displayed.

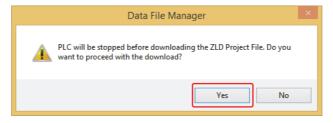
2 Specifies the ZLD Project File (.zld) to download, and then click **Open**.

A confirmation message is displayed.



#### 3 Click Yes.

The download starts.





If the program in the target PLC is password protected, the **Enter Password** dialog box is displayed. Enter the password.

This concludes downloading the ZLD Project File (.zld).



- Do not turn off the target device while a ZLD Project File is downloading.
- Turn the power of the target device off and on and download the ZLD Project File once again if the following conditions occur:
  - The ZLD Project File downloading failed, then Data File Manager cannot communicate with the target device.
  - The cable was disconnected or the power was turned off while Data File Manager and the target device were communicating, and the target device no longer responds.



You can download by double-clicking the ZLD Project File. For details, refer to Chapter 1 "Double-click Action Tab" on page 1-13.

## 4.2 Download System Software

FC6A FC5A FC4A FT1A MICRO/I

You can change the system software in the target PLC.

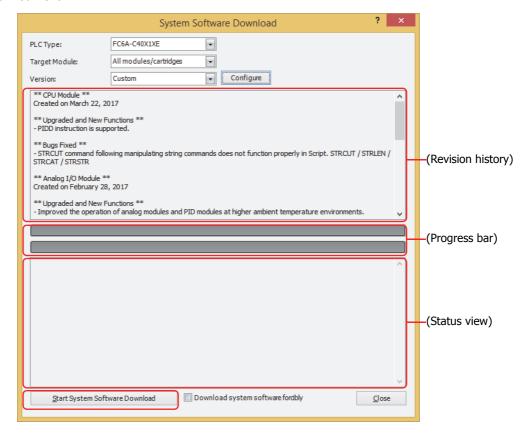
1 Click on ▼ to the right of (Download), and then click Download System Software.

The **System Software Download** dialog box is displayed.

2 Change the settings as necessary, and then click **Start System Software Download**.

The system software starts downloading.

Example: FC6A-C40X1XE



#### PLC Type

Displays the type number of the PLC which communicates with Data File Manager.

# ■ Target Module\*1

Select the module to download the system software from the following.

All modules/cartridges, CPU Module, Analog I/O Module, PID Module, HMI Module,

Communication Module, Expansion Interface Remote Master Module 2,

Expansion Interface Remote Slave Module\*2, Bluetooth Communication Cartridge

#### Version

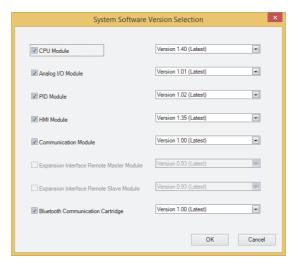
Specifies the version of the system software as **Latest version** or **Custom**. Selects the version to download for each module when **Custom** is selected.

<sup>\*1</sup> FC6A only

<sup>\*2</sup> FC6A-D16X1CEE, FC6A-D32X3CEE only

#### Configure button\*1

If you select **Custom** for **Version**, click this button to display the **System Software Version Selection** dialog box, which you can use to specify the module to download the system software to and the system software version. Select all the check boxes for the modules which you want to download. Select the system software version for each module, and then click **OK**.



## ■ Baud Rate\*2

Select Baud Rate for download.

#### (Revision history)

The revision history related to the system software of the module selected in the **Target Module**\*1 selection is displayed here.

#### (Progress bar)

System software download status is displayed by a progress bar.

## (Status display)\*1

The success or failure of the system software download for each target module is displayed here.

The slot position and the PLC type are both displayed for analog modules and PID modules.

## Download system software forcibly\*1

Select this check box, if you want to download system software forcibly regardless of the system software version in the target device. This check box is not recommended usual use.



- If the PLC is running, it is stopped automatically before the system software download starts.
- The system software download takes about one minute.



Older system software can also be downloaded to the PLC if required.

3 When system software download is completed, complete message is displayed. Click OK button, then the System Software Download dialog box is closed.



- After the system software has downloaded, the PLC will be in the STOP state. Use Data File Manager, WindLDR operations, FC6A MICROSmart function switch operations, or HMI module LCD operations to run the PLC.
- The user program stored in the PLC before downloading the system software remains and is executed when the PLC is restarted. A user program execution error may occur if an older system software is downloaded to the PLC.
- If the system software download fails, download it again.
- When communicating with the target device over Bluetooth communication, the system software cannot be downloaded.

<sup>\*1</sup> FC6A only

<sup>\*2</sup> FC5A, FC4A only

# 5 Uploading

## 5.1 Upload a ZLD Project File

FC6A FC5A FC4A FT1A MICRO/I

Uploads a program in the target PLC to your computer, and saves it as the ZLD Project File (.zld).

1 Click [ (Upload) on the toolbar.

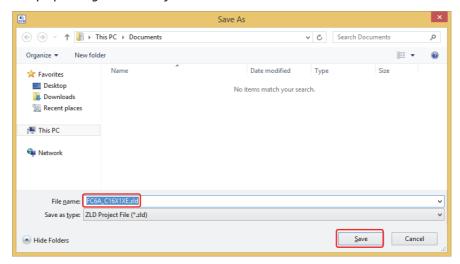
The **Save As** dialog box is displayed.

**2** Enter the destination and the file name, and then click **Save**.

The upload starts.

If the file already exists with the same name in the upload folder, an overwrite confirmation message is displayed.

- Click **OK** to start uploading the ZLD Project File.
- Click Cancel to stop uploading the ZLD Project File.





If the program in the target PLC is password protected, the **Enter Password** dialog box is displayed. Enter the password.

This concludes uploading the ZLD Project File (.zld)

# 6 Downloading or Uploading the Device Address Data



## 6.1 Device Address Data

## Data Format

The data of device addresses is consistent of the values for the amount of data specified by Number of Data on Device Address Data Setting dialog box.

```
"Value of Device Address",

"Value of Device Address address number+1",

"Value of Device Address address number+2",

...

"Value of Device Address address number (n-1)",
```

## Creating Device Address Data with a Text Editor

You can edit the device address data using Notepad, commercially available text editors, or spreadsheet software.

1 Write the data for the amount of data in "value of device address" comma (,) new line order.

Example: Number of Data is 5, the values are 1111, 2222, 3333, 4444, 5555 in order.

1111, 2222, 3333, 4444, 5555,

2 Save the file with the ".csv" extension.

# Supported Device Address

The range of device address and the maximum number of data that can be read and written is as follows:

Internal Device	FC6A-D16/-D32			
Name	Device Address	Maximum number of data		
Internal Relay	M0 to M7997	6400		
Internal Relay	M10000 to M21247	9000		
Special Internal Relay	M8000 to M9997	1600		
Shift Registers	R0 to R255	256		
Timer current values	TP0 to TP1999	2000		
Counter current values	CP0 to CP511	512		
	D0 to D7999	8000		
Data Register	D10000 to D61999	52000		
	D70000 to D269999	200000		
Special Data Register	D8000 to D8899	900		

Internal Device	FC6A-C16/-C24		FC5A-D12X1E	
Name	Device Address	Maximum number of data	Device Address	Maximum number of data
Internal Relay	M0 to M7997	6400	M0 to M2557	2048
Internal Kelay	M10000 to M17497	6000	140 (0 142557	2040
Special Internal Relay	M8000 to M8317	256	M8000 to M8317	256
Shift Registers	R0 to R255	256	R0 to R255	256
Timer current values	TP0 to TP1023	1024	TP0 to TP255	256
Counter current values	CP0 to CP511	512	CP0 to CP255	256
	D0 to D7999	8000	D0 to D1999	2000
Data Register			D2000 to D7999	6000
	D10000 to D55999	46000	D10000 to D49999	40000
Special Data Register	D8000 to D8499	500	D8000 to D8499	500

Internal Device	FT1	A-12	FT1A-24/-40/-48		
Name	Device Address	Maximum number of data	Device Address	Maximum number of data	
Internal Relay	M0 to M317	256	M0 to M1277	1024	
Special Internal Relay	M8000 to M8177	144	M8000 to M8177	144	
Shift Registers	R0 to R127	128	R0 to R127	128	
Timer current values	TP0 to TP99	100	TP0 to TP199	200	
Counter current values	CP0 to CP99	100	CP0 to CP199	200	
Data Register	D0 to D399 400	400	D0 to D999	1000	
Data Register		D1000 to D1999	1000		
Special Data Register	D8000 to D8199	200	D8000 to D8199	200	

## 6.2 Download Device Address Data

The device address data (.csv) saved in a computer can be downloaded to the target device and written the values to device addresses.

1 Click (Downland DeviceAddress Data (.csv)) on the toolbar.

The **Device Address Data Setting** dialog box is displayed.

2 Specifies the device address to write the values, and then click **OK**.

The **Open** dialog box is displayed.



#### Device Type

Selects the device type of the device address to write the values.

#### Address Number

Specifies the start address number of the device address to write the values.

#### Number of Data

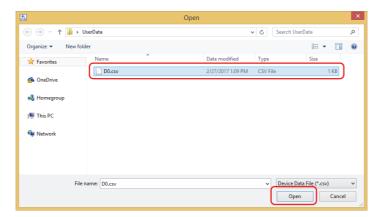
Specifies the number of data of the device address to write the values.



For details about the device address that can be used with the target device, refer to "Supported Device Address" on page 2-13.

3 Select the Device Address Data (.csv), and then click **Open**.

The Write Device Address Data dialog box is displayed, and then the device address data starts downloading.



4 Click Close on the Write Device Address Data dialog box.

This concludes downloading the device address data.



- Do not turn off the target device while the device address data is downloading.
- Turn the power of the target device off and on and download the ZLD Project File once again if the following conditions occur:
  - The device address data downloading failed, then Data File Manager cannot communicate with the target device.
  - The cable was disconnected or the power was turned off while Data File Manager and the target device were communicating, and target device no longer responds.

## 6.3 Upload Device Address Data

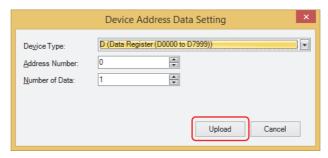
The values of device addresses can be read from the target device and saved it as a CSV file in a computer.

1 Click (Upload Device Address Data (.csv)) on the toolbar.

The **Device Address Data Setting** dialog box is displayed.

2 Specifies the device address to read the values, and then click **OK**.

The **Save As** dialog box is displayed.



## Device Type

Selects the device type of the device address to read the values.

#### Address Number

Specifies the start address number of the device address to read the values.

## Number of Data

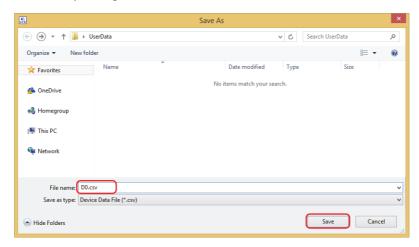
Specifies the number of data of the device address to read the values.



For details about the device address that can be used with the target device, refer to "Supported Device Address" on page 2-13.

3 Enters a file name, and then click **Save**.

The device address data starts uploading.



4 Click Close on the Read Device Address Data dialog box.

This concludes uploading the device address data.

# 7 Clear



## 7.1 Clear Data from the Target Device

Deletes data from the internal memory of the target device.

1 Click on ▼ to the right of (Clear) on the toolbar, and then select the menu for deleting data. The progress dialog box is displayed, and then the data starts deleating.

## ■ Clear Values of All Device Addresses

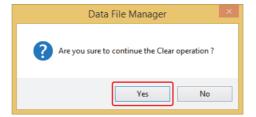
Clears the values from device addresses stored in the internal memory of the target device. The target device types are as follows:

Inputs, Outputs, Internal Relays, Shift Registers, Data Registers, Expansion data registers, Timer current values, and Counter current values

#### Clear Error

Clears error information stored in the internal memory of the target device.

2 Click **Close** on the progress dialog box.



This concludes clearing data.

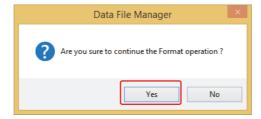
# 8 Formatting the SD Memory Card



Formats an SD memory card inserted in a target PLC.

- Click (Format SD Memory Card) on the toolbar.
   The confirmation message is displayed.
- 2 Click Yes.

The format is executed.



This concludes formatting the SD memory card.



Formatting the SD memory card on the PLC is comparable to formatting it with the quick format option in Windows.

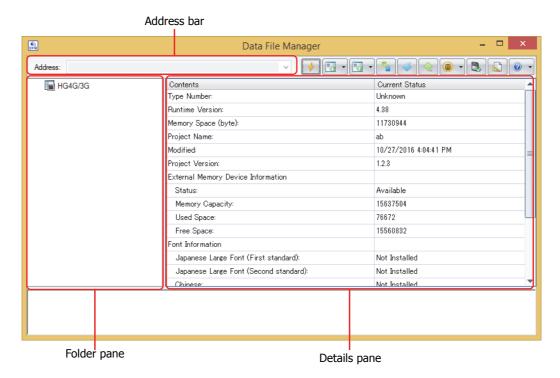
# Chapter 3 Using HMI

This chapter describes how to use Data File Manager when communicating with the HMI.

# 1 Display System Information

FC6A FC5A FC4A FT1A MICRO/I

You can get the system information of the target device by clicking the type number on the Folder pane.



#### Address bar

The displayed content varies based on the selected communication port.

USB: / (slash)

Ethernet: IP Address:Port Number

Example: 192.168.1.6:2537/

#### ■ Folder pane

Displays the type number of the target device.

#### Details pane

Displays the system information of the target device.

# 2 Display or Operate Files and Folders

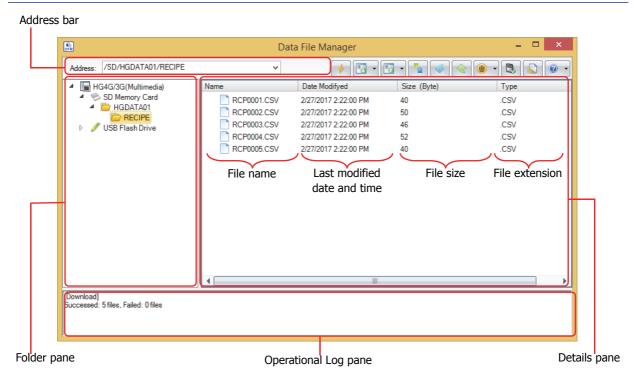
FC6A FC5A FC4A FT1A MICRO/I

## 2.1 Display Files and Folders

Data File Manager gets the information of files and folders from the external memory device\*1 inserted in target device inserted in the target device, and displays them in the Folder pane and the Details pane.



Use the runtime system version 4.50 or later to display files and folders.



#### Address bar

Displays the folder path of the external memory device selected in the Folder pane.

The displayed content varies based on the selected communication port.

USB: external memory device type/folder path

Example: The external memory device is an SD memory card, the folder name is HGDATA01.

Example: /SD/HGDATA01/

Ethernet: Example: The external memory is USB flash drive, the folder path is HGDATA01/ALARMLOG.

Example: 192.168.1.6:2537/USB/HGDATA01/ALARMLOG

## Folder pane

Displays the folder structure as a tree. Click a folder to move to the level in that folder (up or down).

1st level (root): Displays the target device as an icon and text.

2nd level: Displays the external memory device inserted in the target device as an icon and text.

3rd level and lower: Displays the folders in the external memory device as a tree.

<sup>\*1</sup> Only USB flash drive for HG2G-5T, HG1G/1P

#### Details pane

Displays a list of the files and folders in the folder selected on the Folder pane.

You can create a new folder, rename or delete files and folders.



Don't operate a file or a folder during its reading or writing operation by following functions.

- · Recipe function
- Alarm Log function
- Data Log function
- Operation Log function.
- Sound Function
- Multimedia Function
- Creates a new folder

Click Create Folder on the right click menu.

• Rename a file or folder

Selects a file or folder, and then click **Rename** on the right click menu or press the **F2** key.

Deletes files and folders
 Selects files and folders, and then click **Delete** on the right click menu or press the **DELETE** key.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

## Operational Log pane

On the Folder pane or the Details pane, the operational log is displayed by executing the following operations.

Operation	Description	Log format
Download	Displays the number of files that were successfully downloaded and the number of files that failed to be downloaded. For the operating procedures, refer to "2.2 Download Files and Folders" on page 3-4.	[Download] Success: ### file(s), Failed: ### file(s)
Upload	Displays the number of files that were successfully uploaded and the number of files that failed to be uploaded. For the operating procedures, refer to "2.3 Upload Files and Folders" on page 3-6.	[Upload] Success: ### file(s), Failed: ### file(s)
Delete	Displays the number of files that were successfully deleted and the number of files that failed to be deleted. For the operating procedures, refer to the above "Deletes files and folders".	[Delete] Success: ### file(s), Failed: ### file(s)

###: Number of files

## 2.2 Download Files and Folders

Files and folders saved on the computer will be written to the external memory device\*1 inserted in the target device.

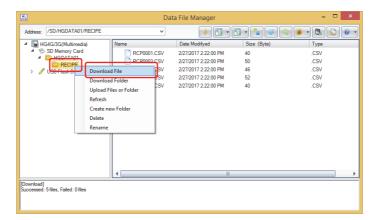


Don't download to a folder during its reading or writing operation by following functions.

- · Recipe function
- Alarm Log function
- · Data Log function
- · Operation Log function.
- Sound Function
- Multimedia Function

#### Download Files

1 Right-click a download destination folder on the folder pane, and then click **Download File**.
The **Open** dialog box is displayed.



2 Specifies the files to download and click **Open**.

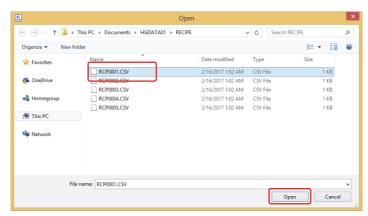
The download starts.

If there is a file with the same file name in the download destination folder, an overwrite confirmation message is displayed.

- Click **OK** to start downloading the files.
- Click Cancel to stop downloading the files.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.



This concludes downloading files.

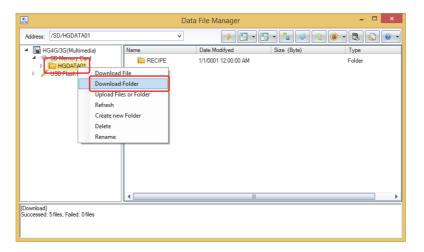


If files are selected with Explorer on the computer and then dragged and dropped to the details pane, those selected files can be downloaded to the External memory inserted in target device.

\*1 Only USB flash drive for HG2G-5T, HG1G/1P

## Download Folders

1 Right-click a download destination folder on the folder pane, and then click **Download Folders**. The **Browse For Folder** dialog box is displayed.



2 Select the folder to download and click **OK**.

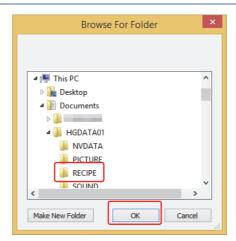
The download starts.

If there is a folder with the same folder name in the download destination folder, an overwrite confirmation message is displayed.

- Click **OK** to start downloading the folder.
- Click Cancel to stop downloading the folder.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.



This concludes downloading folders.



If files are selected with Explorer on the computer and then dragged and dropped to the details pane, those selected files can be downloaded to the External memory inserted in target device.

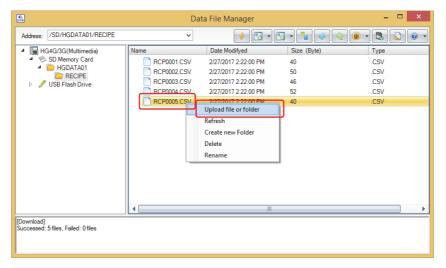
## 2.3 Upload Files and Folders

Files and folders displayed in the details pane will be saved to the computer.



Don't upload a file or a folder during its reading or writing operation by following functions.

- · Recipe function
- Alarm Log function
- · Data Log function
- Operation Log function.
- Sound Function
- Multimedia Function
- 1 Right-click the files and folders to upload in the details pane, and then click the Upload Files and Folders.
  The Browse For Folder dialog box is displayed.



2 Enter the destination and the file name and then click **OK**.

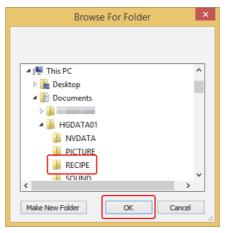
The upload starts.

If there is a file or folder with the same file or folder name in the upload folder, an overwrite confirmation message is displayed.

- Click **OK** to start uploading the files and folders.
- Click **Cancel** to stop uploading the files and folders.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.



This concludes uploading files and folders.



If files and folders are selected in the details pane and then dragged and dropped to Explorer on the computer, those selected files and folders can be uploaded.

# 3 Downloading



## 3.1 Download a ZNV Project File to the Target Device

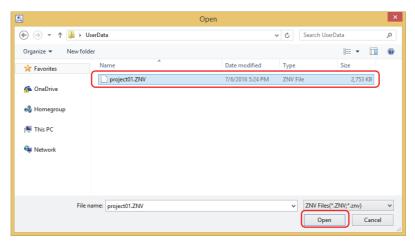
A ZNV Project File (.znv) saved in a computer is downloaded to the target device.

1 Click [ Oownload) on the toolbar.

The **Open** dialog box is displayed.

2 Select the ZNV Project File (.znv), and then click **Open**.

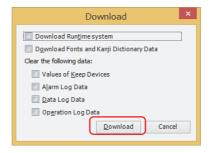
The **Download** dialog box is displayed, and then the ZNV Project File starts downloading.





If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

3 Check the download data details, and then click **Download**.



• Download Runtime system

Select this check box to force download runtime system included in the ZNV Project File when the ZNV Project File is downloaded.

- Download Fonts and Kanji Dictionary Data
   Select this check box to download the fonts and dictionary data included in the ZNV Project File to MICRO/I when downloading the ZNV Project File.
- · Clear the following data

After downloading the ZNV project file, select the data to be cleared from the following. Values of Keep Devices, Alarm Log Data, Data Log Data, Operation Log Data

When the **Download Runtime system** check box is selected, these check boxes are also selected.

And clear all the values of the Keep Devices and the log data when the ZNV Project File that changes settings of the data storage area is downloaded."



The **Download Fonts and Kanji Dictionary Data** and the **Clear the following data** options are supported by the system software version 4.63 or later included in the ZNV Project File to be downloaded.

4 Click Close on the **Download** dialog box.

This concludes downloading a ZNV Project File.



- Do not turn off the target device while a ZNV Project File is downloading.
- Turn the power of the target device off and on and download the ZNV Project File once again if the following conditions occur:
  - The ZNV Project File downloading failed, then Data File Manager cannot communicate with the target device.
  - The cable was disconnected or the power was turned off while Data File Manager and the target device were communicating, and the target device no longer responds.

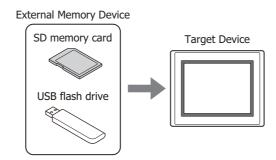


You can download by double-clicking the ZNV Project File. For details, refer to Chapter 1 "Double-click Action Tab" on page 1-13.

## 3.2 Download Files to an External Memory Device Inserted in the Target Device

Specified files can be downloaded to an external memory device<sup>\*1</sup> inserted in the target device. The files are downloaded to the External Memory Device folder specified on the Project Settings dialog box for the currently running project.

1 Insert the external memory device into the target device.



2 Click on ▼ to the right of (Download) on the toolbar, and then select the menu for downloading files to the external memory device.

The **Open** dialog box is displayed.

### Download Files to External Memory Device

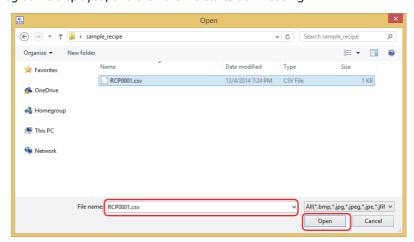
Stops operation of the target device, and then downloads files to the external memory device inserted in the target device. When the file download is complete, operation resumes.

## Download Files to External Memory Device while running

Downloads the file to the external memory device inserted in the target device without stopping operation of the target device.

3 Select the file to download, and then click **Open**.

The **Download** dialog box is displayed, and then the file starts downloading.





If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

4 Click Close on the External Memory Device Maintenance dialog box.

This concludes downloading files.

<sup>\*1</sup> SD memory card for HG5G/4G/3G/2G-V, HG4G/3G and HG2G-5F, USB flash drive for HG2G-5T, HG1G/1P

## 4 Uploading



## 4.1 Upload a ZNV Project File from the Target Device

Upload the project used for operation on the target device and save it as the ZNV Project File (.znv) in a computer.

1 Click [1] (Upload) on the toolbar.

The Upload dialog box is displayed.



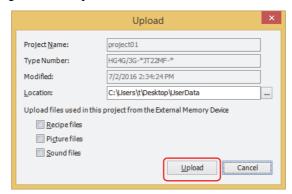
Use the runtime system version 4.36 or later to upload a ZNV Project File.

**2** Check the project data details, and then click **Upload**.

The Upload dialog box is displayed, and then the file starts uploading.

If the file already exists with the same name in the upload folder, an overwrite confirmation message is displayed.

- Click **Yes** to start uploading the ZNV Project File.
- Click Cancel to stop uploading the ZNV Project File.



#### Project Name

The uploaded ZNV Project File is saved with the currently displayed name.

### Type Number

Displays the type number of the target device.

#### Modified

Displays the time that project downloaded to the target device was last saved.

#### Location

Specifies the location for saving the uploaded ZNV Project File.

Click .... to display the **Browse folders dialog** box. Select the location for saving, then click **OK**.

#### Upload files used in this project from the External Memory Device

To upload files located on an external memory device inserted in the target device that are used by the project together with the ZNV Project File, select the file to be uploaded from the following.

Recipe Files, Picture Files, Sound Files\*1



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

3 Click Close on the Upload dialog box.

This concludes uploading of ZNV Project File.

\*1 HG5G/4G/3G-V and HG4G/3G only

## 4.2 Upload Log Data

The log data stored in the internal memory of the target device can be read and saved as a CSV format file.

1 Click on ▼ to the right of (Upload) on the toolbar, and then select the menu for uploading data.
The Browse For Folder dialog box is displayed.

#### Upload All Log Data

Uploads the Alarm Log data, the Data Log data and the Operation Log data.

#### Upload Alarm Log Data

Uploads the data sampled by the Alarm Log function.

#### Upload Data Log Data

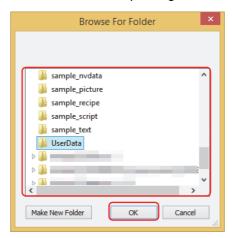
Uploads the data sampled by the Data Log function.

### Upload Data Operation Log Data

Uploads the data sampled by the Operation Log function.

2 Specifies the location to save the uploaded data, and then click **OK**.

The **Upload** dialog box displayed, and then the data starts uploading.





If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

3 Click **Close** on the **Upload** dialog box.

This concludes uploading log data.

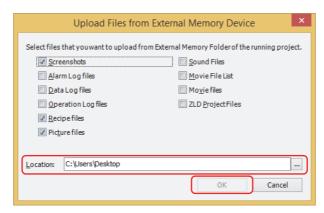
## 4.3 Upload Files in the External Memory Device inserted in the Target Device

Specified files in an external memory device\*1 inserted in a target device can be read and saved to a computer. You can upload the files in the External Memory Device folder specified on the Project Settings dialog box for the currently running project.

1 Click on ▼ to the right of (Upload) on the toolbar, and then click Upload Files from External Memory Device.

The **Upload Files from External Memory Device** dialog box is displayed.

**2** Select the items to be uploaded, and then specify the destination folder in **Location**.



Uploadable data is as follows.

- Screenshots
- · Alarm Log Files
- · Data Log files
- · Operation Log files
- Recipe files
- · Picture files
- Sound Files\*2
- Media File List\*3
- Movie files\*3
- · ZLD Project Files



Click .... to call up the Select a Folder dialog box and specify the destination folder for uploading.

3 Click OK.

The External Memory Device Maintenance dialog box is displayed, and then the files start uploading.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

4 Click Close on the External Memory Device Maintenance dialog box.

This concludes uploading files.

<sup>\*1</sup> SD memory card for HG5G/4G/3G/2G-V, HG4G/3G and HG2G-5F, USB flash drive for HG2G-5T, HG1G/1P

<sup>\*2</sup> HG5G/4G/3G-V and HG4G/3G only

<sup>\*3</sup> This is applicable for models with a video interface only.

# 5 Downloading or Uploading the Device Address Data

FC6A FC5A FC4A FT1A MICRO/I

### 5.1 Device Address Data

#### Data Format

The data of device addresses is consistent of the values for the amount of data specified by Number of Data on Device Address Data Setting dialog box.

```
"Value of Device Address",

"Value of Device Address address number+1",

"Value of Device Address address number+2",

"Value of Device Address address number (n-1)",
```

## Creating Device Address Data with a Text Editor

You can edit the device address data using Notepad, commercially available text editors, or spreadsheet software.

1 Write the data for the amount of data in "value of device address" comma (,) new line order.

Example: Number of Data is 5, the values are 1111, 2222, 3333, 4444, 5555 in order.

1111, 2222, 3333, 4444, 5555,

2 Save the file with the ".csv" extension.

## Supported Device Address

The range of device address and the maximum number of data that can be read and written is as follows:

Internal Device Name	Device Address	Maximum number of data
HMI Data Register	LDR0 to LDR8191	2000
HMI Keep Register	LKR0 to LKR8191	2000

## 5.2 Download Device Address Data

The device address data (.csv) saved in a computer can be downloaded to the target device and written the values to device addresses.

1 Click (Downland DeviceAddress Data (.csv)) on the toolbar.

The **Device Address Data Setting** dialog box is displayed.

2 Specifies the device address to write the values, and then click **OK**.

The **Open** dialog box is displayed.



#### Device Type

Selects the device type of the device address to write the values as **LDR: HMI Data Register** or **LKR: HMI Keep Register**.

#### Address Number

Specifies the start address number of the device address to write the values.

#### Number of Data

Specifies the number of data of the device address to write the values.

#### Reset the target device after writing the Device Address Data

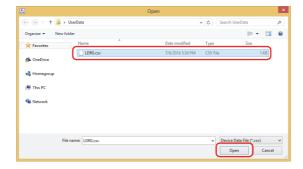
Select this check box to reset the target device when the device address data download is complete.



For details about the device address that can be used with the target device, refer to "Supported Device Address" on page 3-13.

3 Select the Device Address Data (.csv), and then click **Open**.

The Write Device Address Data dialog box is displayed, and then the device address data starts downloading.





If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

4 Click Close on the Write Device Address Data dialog box.

This concludes downloading the device address data.



- Do not turn off the target device while the device address data is downloading.
- Turn the power of the target device off and on and download the ZNV Project File once again if the following conditions occur:
- The device address data downloading failed, then Data File Manager cannot communicate with the target device.
- The cable was disconnected or the power was turned off while Data File Manager and the target device were communicating, and target device no longer responds.

## 5.3 Upload Device Address Data

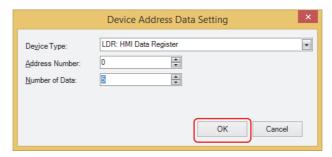
The values of device addresses can be read from the target device and saved it as a CSV file in a computer.

1 Click (Upload Device Address Data (.csv)) on the toolbar.

The **Device Address Data Setting** dialog box is displayed.

2 Specifies the device address to read the values, and then click **OK**.

The **Save As** dialog box is displayed.



## Device Type

Selects the device type of the device address to read the values as LDR: HMI Data Register or LKR: HMI Keep Register.

#### Address Number

Specifies the start address number of the device address to read the values.

#### Number of Data

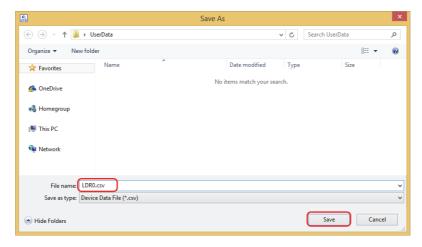
Specifies the number of data of the device address to read the values.



For details about the device address that can be used with the target device, refer to "Supported Device Address" on page 3-13.

**3** Enters a file name, and then click **Save**.

The **Read Device Address Data** dialog box is displayed, and then the device address data starts uploading.





If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

4 Click Close on the Read Device Address Data dialog box.

This concludes uploading the device address data.

## 6 Clear



## 6.1 Clear Data from the Target Device

Deletes data from the internal memory of the target device.

1 Click on ▼ to the right of (Clear) on the toolbar, and then select the menu for deleting data. A confirmation message is displayed.

#### Clear All data

Deletes project data, Alarm Log data, Data Log data, and Operation Log data. It also clears the values from all device addresses.

#### Clear Alarm Log Data

Deletes the data collected by the Alarm Log function.

## Clear Data Log Data

Deletes the data collected by the Data Log function.

#### Clear Operation Log Data

Deletes the data collected by the Operation Log function.

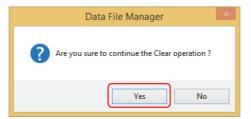
#### ■ Clear Values of All Device Addresses

Clears the values of all device addresses.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

2 Click Yes.



3 Click Close on the progress dialog box.

This concludes clearing data.

## 6.2 Clear Data from the External Memory Device inserted in the Target Device

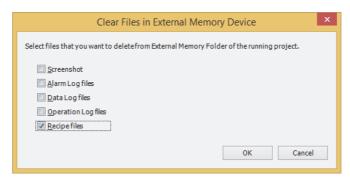
After stopping operation of the target device, the data saved in the External Memory Device\*1 folder of the external memory device inserted in the target device can be deleted.

1 Click on ▼ to the right of @ (Clear) on the toolbar, and then click Clear Files stored in External Memory Device.

The Clear Files in External Memory Device dialog box is displayed.

2 Select the check box for the data items to be deleted from the External Memory Device folder.

Screenshot, Alarm Log files, Data Log files, Operation Log files, and Recipe files

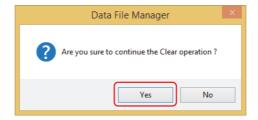


3 Click OK.

A confirmation message is displayed.

4 Click Yes.

The **External Memory Device Maintenance** dialog box is displayed, and then the files in the external memory device starts deleting.





If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

5 Click Close on the External Memory Device Maintenance dialog box.

This concludes clearing files in the external memory device.

<sup>\*1</sup> SD memory card for HG5G/4G/3G/2G-V, HG4G/3G and HG2G-5F, USB flash drive for HG2G-5T, HG1G/1P

# 7 Formatting



Stops operation of the target device and formats an external memory device\*1 inserted in the target device.

## 7.1 Format an External Memory Device Inserted in the Target Device

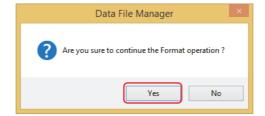
1 Click (Format an External Memory Device) on the toolbar.
A confirmation message is displayed.



If the project of the target device is password protected, the **Enter Password** dialog box is displayed. Enter the user name and password.

2 Click Yes.

The **External Memory Device Maintenance** dialog box is displayed, and then the external memory device starts formatting.



3 Click Close in the External Memory Device Maintenance dialog box.

This concludes formatting the external memory device.

<sup>\*1</sup> SD memory card for HG5G/4G/3G/2G-V, HG4G/3G and HG2G-5F, USB flash drive for HG2G-5T, HG1G/1P

# **Chapter 4 Command Line**

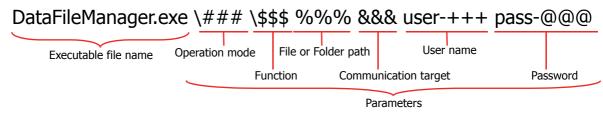
This chapter describes how to use the Data File Manager on command line.

## 1 Command line

FC6A FC5A FC4A FT1A MICRO/I

## 1.1 Description Format

To execute various function by using a command line, type an executable file name of the Data File Manager and parameters corresponding to each functions. The description format is as follows.





- A space is needed between a parameter and a parameter.
- A space is needed when an option is specified.
- A user name in parameters is needed only when \HMI, \normal, \HMI -S or \silent is specified.

#### 1.2 Details of Parameters

Operation mode (required)
 Specifies the operation mode. Supported parameters vary based on the target device.

Paramet	ters	Туре	Description	PLC	НМІ
\PLC		Normal mode	Data File Manager executes commands showing only the dialog boxes of each functions and messages without the main window.	YES	NO
\PLC	-S	Silent mode	Data File Manager executes only commands without any showing of dialog boxes and messages.	ILS	NO
\HMI		Normal mode	Data File Manager executes commands showing only the dialog boxes		
\normal		Normal mode	of each functions and messages without the main window.	NO	YES
\HMI	-S	Silent mode	Data File Manager executes only commands without any showing of		11.5
\silent		Silcht mode	dialog boxes and messages.		

## Function (required)

Specifies the function to execute. Supported parameters vary based on the target device.

#### Download

## Downlanding a project to the internal memory

Parameters		Description	PLC	НМІ
		Downloads a ZLD Project File	YES	NO
	-C	Downloads a ZNV Project File This parameter cannot be specified with -CR, -CF, -CK, -CA, -CL or -COP at the same time.	NO	YES
	-CR	Download the ZNV project file without the runtime system.	NO	YES
\download	-CF	Download the ZNV project file without font and Kanji dictionary data.	NO	YES
	-CK	Download the ZNV project file without clearing the keep device.	NO	YES
	-CA	Download the ZNV project file without clearing the Alarm Log Data.	NO	YES
	-CL	Download the ZNV project file without clearing the Data Log Data.	NO	YES
	-COP	Download the ZNV project file without clearing theOperation Log Data.	NO	YES



To use the following parameters, it is required the corresponding version of the system software. Check the version of system software included in the ZNV project file to be downloaded.

-CR, -CF, -CK: 4.55 or later -CA, -CL, -COP: 4.63 or later

For details about the notes on execution results, refer to "Download a ZNV Project File to the Target Device" on page 3-7.



For ZNV Project File download, multiple parameters can be specified.

Example: Download the ZNV project file via the USB port under the following conditions:

- Do not download the system software (-CR)
- Do not download fonts and Kanji dictionary data (-CF)
- Do not clear the Keep Devices (-CK)

DataFileManager.exe \HMI \download -CR -CF -CK USB

#### Downloading files to the external memory device

Parameters		Description	PLC	НМІ
	-R	Download recipe files.	NO	YES
	-C	Download picture files.	NO	YES
\ of download	-W	Download sound files.	NO	YES
\cf_download	-LD	Downloads a ZLD Project File	NO	YES
	-A	Downloads a Movie File List.	NO	YES
	-M	Download movie files.	NO	YES

## Downloading files to the external memory device while running

Parameters		Description	PLC	нмі
	-U	Download recipe files.	YES	YES
	-T	Download picture files.	NO	YES
\cf download	-X	Download sound files.	NO	YES
\ci_dowilload	-LR	Downloads a ZLD Project File	YES	YES
	-Y	Downloads a Movie File List.	NO	YES
	-G	Download movie files.	NO	YES

## **Downloading the Device Address Data**

Parameters		Description	PLC	нмі
\write_[***]_###	-R*1 (When don't reset a target device, this parameter isn't required.)	Downloads the Device Address Data  ***: Device Address  ###: Number of data  The supported device address varies based on the target device. For details, refer to the following pages.  PLC: Chapter 2 "Supported Device Address" on page 2-13  HMI: Chapter 3 "Supported Device Address" on page 3-13	YES	YES

<sup>\*1</sup> HMI only

## Upload

## Uploading data from the internal memory

Parame	eters	Description	PLC	НМІ
	-P	Uploads a ZLD Project File.	YES	NO
	-6	Uploads a ZNV Project File.	NO	YES
	-P -R	Uploads a ZNV Project File from the internal memory and recipe files from the external memory device.	NO	YES
	-P -C	Uploads a ZNV Project File from the internal memory and picture files from the external memory device.	NO	YES
\upload	-P -W	Uploads a ZNV Project File from the internal memory and sound files from the external memory device.	NO	YES
	-ALL	Uploads all log data.	NO	YES
	-A	Uploads the Alarm Log data.	NO	YES
	-L	Uploads the Data Log data.	NO	YES
	-OP	Uploads the Operation Log data.	NO	YES



For the log data, multiple files can be uploaded.

Example: The parameter for uploading the Alarm Log data and the Data Log data.  $\label{eq:Log_data} \mbox{ \begin{tabular} $L$ og data and the Data Log data. \end{tabular}}$ 

## Uploading files from the external memory device

Paran	neters	Description	PLC	НМІ
	-S	Upload the screenshot.	NO	YES
	-A	Upload the Alarm Log files.	NO	YES
	-L	Upload the files of the DLOG instruction. Upload all files and subfolders under the "DATALOG" folder.	YES	NO
		Upload the Data Log files.	NO	YES
	-OP	Upload the Operation Log files.	NO	YES
	-R	Upload the recipe files. When the target device is PLC, all files and subfolders under the "RECIPE" folder are uploaded.	YES	YES
\cf_upload	-C	Upload the picture files.	NO	YES
	-W	Upload the sound files.	NO	YES
	-LD	Uploads a ZLD Project File. When the target device is PLC, all files and subfolders under the "PROGRAM" folder are uploaded.	YES	YES
	-F	Uploads a Movie List File.	NO	YES
	-M	Upload movie files.	NO	YES
	-Т	Upload the files of the TRACE instruction. Upload all files and subfolders under the "TRACE" folder.	YES	NO
	-ALL	Upload all files in the specified folder.	YES	YES



Multiple files can be uploaded.

Example: The parameter for uploading the recipe files and the ZLD Project File.

\cf\_upload -R -LD

## **Uploading Device Address Data**

Parameters	Description	PLC	HMI
\read_[***]_###	Uplaods the Device Address data, and then saves it as a CSV format file.  ***: Device Address  ###: Number of data  The supported device address varies based on the target device. For details, refer to the following pages.  PLC: Chapter 2 "Supported Device Address" on page 2-13  HMI: Chapter 3 "Supported Device Address" on page 3-13	YES	YES

#### Clear

## Clearing the data stored in the internal memory

Parameters		Description	PLC	нмі
\initialize	-ALL	Clears all of the data.	NO	YES
	-A	Clears the Alarm Log data.	NO	YES
	-L	Clears the Data Log data.	NO	YES
	-OP	Clears the Operation Log data.	NO	YES
	-LK	Clears the values from all device addresses.	YES	YES

## Clearing files in the external memory device\*1

Parame	eters	Description	PLC	нмі
	-S	Clear the screenshot. The files in the "CAPTURE" folder under the External Memory Folder.	NO	YES
	-A	Clear the Alarm Log files. Clear all files in the "ALARMLOG" folder under the External Memory Folder.	NO	YES
	-L	Clear the files of the DLOG instruction. Clear all files and subfolders under the "DATALOG" folder.	YES	NO
\cf_initialize		Clear the Data Log files. Clear all files in the "DATALOG" folder under the External Memory Folder.	NO	YES
	-OP	Clear the Operation Log files. Clear all files in the "OPERATIONLOG" folder under the External Memory Folder.	NO	YES
	-R	Clear the recipe files. Clear all files in the "RECIPE" folder under the External Memory Folder.	YES	YES
	-Т	Clear the files of the TRACE instruction. Clear all files and subfolders under the "TRACE" folder.	YES	NO



Multiple files can be cleard.

Example: The parameter for clearing the Data Log files and the recipe files.  $\c _-$  initialize -L -R

## ■ Format

Parameters	Description	PLC	нмі
\cf_format	Formats an external memory device <sup>*1</sup> inserted in the target device.	YES	YES

<sup>\*1</sup> SD memory card for HG5G/4G/3G/2G-V, HG4G/3G, HG2G-5F, FC6A and FT1A, USB flash drive for HG2G-5T, HG1G/1P.

## • File or Folder path

Specifies a file to download or a folder to upload.

Specifies a location of the file or the folder with an absolute path. Encloses the absolute path in double quotation (").

When you download multiple files, each file name must be separated by a space.

Parameters	Description
Example: "C:\USERDATA\SamplePloject.znv"	Specify a file path of the file to download.
Example: "C:\USERDATA\uploaddata"	Specify a folder path of the location for saving uploaded files.
Example: "C:\USERDATA\RCP0001.CSV" "C:\USERDATA\RCP0002.CSV"	To download multiple files, the individual file paths can be specified by separating the paths with a space.



- Don't enter this parameter when the **Clear** or the **Format** is set for the **Function**.
- When the **Silent mode** is set for the **Operation mode**, this parameter is required.



When the **Normal mode** is set for the **Operation mode** and this parameter is not entered, the Open dialog box or the Browse For Folder dialog box opens before start communicating.

## Communication target (required)

Specifies the target communication port or IP address. The supported parameters vary based on the target device.

Parameters	Communication port	Description	PLC	нмі
COM###:a:b:c:d COM###:BLUETOOTH	Serial	Specify the COM port and the communication settings. ###: Port Number a: Baud Rate, b: Data Bits, c: Parity (Even=1, Odd=2, None=0), d: Stop Bits When :a:b:c:d is not entered, the Data File Manager automatically detect the communication settings. Example: COM1:115200:7:0:1 When communicating with the target device over Bluetooth communication, specify the COM port and BLUETOOTH. Example: COM1:BLUETOOTH	YES	NO
USB	USB	Specify the USB.	YES	YES
xxx.xxx.xxx.xxx:###	Ethernet	Specify the target IP address. xxx: Value from 0 to 255 ###: Port number. Example: 192.168.1.5:2101 When ### is not entered, the target device is connected to the following port number. PLC: 2101 HMI: 2537	YES	YES



When the **Serial** is selected for the communication port, an external memory device inserted in the target device cannot be accessed. However, when Bluetooth communication is used, an external memory device inserted in the target device can be accessed.

#### User name

Specifies the user name set for a project.

Parameters	Description	PLC	НМІ
user-+++	Specify the user name. When user name is specified, user- is always needed. +++: User name	NO	YES



When password corresponding to the specified user name is incorrect, error message is displayed.



- When user name is specified, password is needed.
   When target device uses security feature and runtime system version is 4.55 or later, user name is needed.
- Encloses the user name with double quotation marks (") when it contains a space.



Example: The parameter for uploading the ZNV Project File when target device is configured that User name is "admin 1" and Password is "PASSWORD" in Administrator security group.

DataFileManager.exe\HMI\upload -P USB user-"admin 1" pass-PASSWORD

#### Password

Specifies the password set for a project.

Parameters	Description	PLC	HMI
pass-@@@	Specify the password. When password is specified, pass- is always needed. @@@: Password	YES	YES



When password is incorrect, error message is displayed.



- When the **Normal mode** is set for the **Operation mode** and this parameter is not entered, the Enter Password dialog box is displayed.
- Encloses the user name with double quotation marks (") when it contains a space.

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