# Upgrade Information of MPE720 Version 7.26

# 1. Added and Improved Functions

### 1.1 Ver.7.26Upgrade Information

Items added and features improved from MPE720 version 7.24 to version 7.26 are as follows.

No.	Feature	Classification	
1	It supported the MP3300 (CPU-301) controller.	Add function	
2	It supported to the Sigma-7 series SERVOPACK.	Add function	
3	The Sigma-V-MD series (SGDV-MDA02) of 8-axis driving model was added to the	Add function	
3	slave devices that can be assigned to motion control module SVC.		
4	267IF-01 (CC-Link Master) module was added.	Add function	
5	The Task List function was added.	Add function	
6	The maintenance function of the window layout was supported.	Add function	
7	The representational function of the window layout was added.	Add function	
8	The system monitor function was strengthened.	Functional enhancement	
9	The Cross Reference function was strengthened.	Functional enhancement	
10	The Transfer function has been improved.	Functional enhancement	
11	The search in project function was strengthened.	Functional enhancement	
12	The replace in project function has been improved.	Functional enhancement	
13	The editing operation of two or more programs has been improved.	Functional enhancement	
14	The "Display in axis selected" has been improved.	Functional enhancement	
15	The print function has been improved.	Functional enhancement	
16	The recovery function of the project file was supported.	Functional enhancement	
17	The default value of the Group Definition (Axis Variable) has been improved.	Improvement	
18	The operation of the Module Configuration (MC-Configurator) has been improved.	Improvement	
19	The communications setting screen has been improved.	Improvement	
20	The default value of the Variable Display Format was changed.	Improvement	
21	The starting timing of the Communication Platform was changed.	Improvement	
22	The "IMPORT", "EXPORT", "IMPORTL", and "EXPORTL" were added to the	Improvement	
22	System Structure.		
23	The MC-Configurator start operation of the project to which the project password	Improvement	
23	is set has been improved.		
24	The message was added to the Trace Manager function.	Improvement	
25	The Real-Time trace function has been improved.	Improvement	
26	The conversion operation from the MAL file to the YMW file has been improved.	Improvement	
27	The MC-Configurator start operation has been improved.	Improvement	
28	The compile operation of the ladder program has been improved.	Improvement	
29	The compile operation of the IMORTL/EXPORTL command has been improved.	Improvement	
30	The compile operation of the motion program has been improved.	Improvement	
31	The Cross Reference operation of the Local registers has been improved.	Improvement	
32	The operation of the "Search in Project" function has been improved.	Improvement	
33	The operation of "Using register" display of the register list has been improved.	Improvement	
34	The "0.0001%" was added to "Speed unit selection" of the Setting parameter of PO-01 module.	Improvement	
35	The display of the detailed definition screen of the AI-01 and AO-01 modules has been improved.	Improvement	
36	The transfer operation has been improved.	Improvement	

37	The operation of the axis variable comment has been improved.	Improvement
38	The operation of the trigger waiting state of the Real-Time trace function has	Improvement
38	been improved.	
39	The print function has been improved.	Improvement
40	The print of constant variable (C register) has been improved.	Improvement

(\*): When MPE720 Ver.7 before MPE720 Ver.7.11 is already installed in Windows Vista and Windows 7, it may not operate for the newest information of the servo model addition by the axial setup wizard function (the newest information added into the database) updated by after MPE720 Ver.7.13.

Please refer to the following page for operating procedures.

# [About the restriction matter when using MPE720 Ver.7 in Windows Vista and Windows 7]

When MPE720 Ver.7 is used in Windows Vista and Windows 7, the following phenomena might be generated.

<Phenomena>

When MPE720 Ver.7 before MPE720 Ver.7.11 is already installed in Windows Vista and Windows 7, it may not operate for the newest information of the servo model addition by the axial setup wizard function (the newest information added into the database) updated by after MPE720 Ver.7.13.

#### <Measures>

Using a batch file, the following folder is deleted. (\*1) C:¥Users¥UserName(\*2)¥AppData¥Local¥VirtualStore¥Program Files(\*3)¥YASKAWA¥MPE720 Ver7

#### Procedure

1. The batch file enclosed by MPE720 Ver.7 installer is copied to a desktop.

[Download Version] MPE720Ver7\_xxx(\*4)¥Tools¥CleanUp¥MPE720Ver7\_x86.bat (32bitOS) MPE720Ver7\_xxx(\*4)¥Tools¥CleanUp¥MPE720Ver7\_x64.bat (64bitOS) [CD Media Version] D(\*5):¥Tools¥CleanUp¥MPE720Ver7\_x86.bat (32bitOS) D(\*5):¥Tools¥CleanUp¥MPE720Ver7\_x64.bat (64bitOS)

2. The copied batch file is performed.

MPE720Ver7\_x86.bat (32bitOS) MPE720Ver7 x64.bat (64bitOS)

Control Panel >	System and Security 🕨 System		
Control Panel Home Device Manager Remote settings System protection Advanced system settings	View basic information Windows edition Windows 7 Home Premiur Copyright © 2009 Microso Service Pack 1 Get more features with a n	n ft Corporation. All rights res	
See also Action Center Windows Update Performance Information and Tools	System Rating: Processor: Installed memory (RAM): System type: Pen and Touch: Computer name; Gomputer name: Full computer name: Computer description: Workgroup;	Intel(R) Pentium(R) CPU 4.00 GB (3.68 GB usable) 64-bit Operating System No Pen or Touch Input is a	rience Index needs to be refreshed P6200 @ 2.13GHz 2.13 GHz wailable for this Display @Change settings

3. "y" is inputted on a command prompt and the Enter button is pushed.



4. The Enter button is pushed on a command prompt after deletion.



- (\*1): When multi-user is using one set of PC, please operate it by each user.
- (\*2): The user account name that logs in enters.
- (\*3): The path changes by OS.

32bitOS: Program Files

64bitOS: Program Files (x86)

- (\*4): The path changes by version.
- (\*5): The path changes by CD/DVD drive.
- (\*6): When an installation path is changed at the time of MPE720 Ver.7 installation, please delete the "MPE720 Ver7" folder which a folder subordinate has below manually according to the installed path.

C:\Users\UserName(\*2)\AppData\Local\VirtualStore

# [About compile of the parallel circuit]

In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

#### <Phenomena>

When the circuit containing the following pattern was created, there was a phenomenon of operating without receiving the condition that the circuit below the OR circuit of  $1^{st}$  class must operate essentially in response to the conditional instruction before the OR circuit of  $1^{st}$  class.

#### <Measures>

When a phenomenon occurs, please carry out re-compile about the Ladder program in MPE720 Ver7 after MPE720 Ver7.24. Or please carry out again "Compile All Programs" of "Compile" menu.



The OR circuit of 1st class: The OR circuit branched from the bus-bar of langue. The OR circuit of 2nd class: The OR circuit branched out of the OR circuit of 1st class.

The OR circuit of 3rd class: The OR circuit branched out of the OR circuit of 2nd class.

□(Conditional instruction): NO Contact, NC Contact, Coil, instruction(==, !=, >, <), power line (------) etc. ☆(Output instruction): Coil, Block instruction(Expression, STORE, COPYW) etc ※However, when all ☆ is coil commands, a phenomenon does not occur. △(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

### <Pattern>

Symbol	Instruction
][	NO Contact
STORE	STORE instruction
()	Coil

<NG Pattern>





# 1.2 Past Upgrade Information

No.	Upgrade Information	Remarks	
1	MPE720 version 7.11 upgrade information	version 7.10→version 7.11	
2	MPE720 version 7.13 upgrade information	version 7.11→version 7.13	
3	MPE720 version 7.14 upgrade information	version 7.13→version 7.14	
4	MPE720 version 7.20 upgrade information	version 7.14→version 7.20	
5	MPE720 version 7.21 upgrade information	version 7.20→version 7.21	
6	MPE720 version 7.23 upgrade information	version 7.21→version 7.23	
7	MPE720 version 7.24 upgrade information	version 7.23→version 7.24	

### 2. Description

### No. 1 It supported the MP3300 (CPU-301) controller.

MP3300 controller that is successor of MP2300 was supported.

1. For MP3300 controller

MP3300 controller was added.

2. The back ground flash preservation function

The function to save the flash on the back ground was supported as a new function of MP3300.

The other engineering operations cannot be done up to now until the flash preservation is completed. And the other engineering operations are possible while saving the flash.

The status of the flash preservation can be monitored by confirming the status bar.

As for the flash preservation operation, it is the same.

#### 3. The FTP server and FTP client function

The logging data and the register data stored in with built-in CPU RAM or USB memory by the file transfer feature (FTP server function) can be downloaded from remoteness to the device.

#### 4. The start measuring high-speed scan processing time mode

The start measuring high-speed scan processing time mode was supported. The function was able to be selected "From 1th scan" and "From 2nd scan".

The best function for the application where initialization etc. is executed to the first scan when the power supply is turned on, or the high-speed scan is postponed only to the first scan, where high-speed time over etc. is generated.

[Support Ver	rsion
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Controller	Support Version			
MP3000 Series	MP3300 (CPU-301) Ver1.10 or later			
MP2000 Series	There is no correspondence.			

### No. 2 It supported to the Sigma-7 series SERVOPACK.

The Sigma-7 series SERVOPACK (MECHATROLINK-III communications reference, Sigma-7S (SGD7S-\*\*\*\*20\*)) that is successor of the Sigma-V were supported.

#### 1. Module Configuration

In the Module Configuration, it changed so that the Sigma-7S series could be assigned.

#### 2. Fixed, Setting, Monitor Parameter

The screen for carrying out a detailed setup of Fixed Parameters, Setting Parameters and Monitor Parameters of the Sigma-7S series was added.

#### 3. Servo Parameter, Servo Monitor

The screen for carrying out a detailed setup of Servo Parameter and Servo Monitor of the Sigma-7S series was added.

Module	Function Module/Slave	Status	Circuit No/Axis	Matian Daviatan	
		Status	Start	pupied circu	Motion Register
01 [CPU-301(16axes)] :	01 [CPU-301(16axes)] :				
	01 CPU				
	02 218IFD		몲 Circuit No1	1	
	03 🖃 SVC		💷 Circuit No1	1	8000 - 87FF[H]
	01 🧰 SGD7S-****20*		03[H] (00[H])		8000 - 807F[H]
	02 UNDERINED				
	03 UNDEFINED				
	04 UNDEFINED				
9 00 ( CPU301(16)[]	05 UNDEFINED				
5	06 UNDEFINED				
8	07 UNDEFINED				
	08 UNDEFINED	]			
	04 🛨 SVR		💷 Circuit No2	1	8800 - 8FFF[H]
	05 M-EXECUTOR				
	06 UNDEFINED				
	07 UNDEFINED				
01 UNDEFINED[	-]				
02 UNDEFINED[	-]				
03 UNDEFINED[	-]				

#### [Support Version]

Control	ler
00110101	.01

Controller	Support Version		
MP3000 Series	MP3300 (CPU-301)	Ver1.10 or later	
	MP3200 (CPU-201, CPU-202)	Ver1.12 or later	
MP2000 Series		Ver2.88 or later	

#### **Option Module**

Module	Support Version
SVC-01	Ver1.12 or later

### No. 3 The Sigma-V-MD series (SGDV-MDA02) of 8-axis driving model was added to the slave devices

### that can be assigned to motion control module SVC.

1. Module Configuration

In the Module Configuration, it changed so that the Sigma-V-MD series could be assigned.

And, in the Module Configuration, when Sigma-V-MD was assigned, it changed so that Sigma-V-MD might be displayed as one group.

The movement of the station number of the assigned SERVOPACK can be changed by drag-and-drop operation.

### 2. Fixed, Setting, Monitor Parameter

The screen for carrying out a detailed setup of Fixed parameters, Setting Parameters and Monitor Parameters of the Sigma–V-MD series was added.

#### 3. Servo Parameter, Servo Monitor

The screen for carrying out a detailed setup of Servo Parameter and Servo Monitor of the Sigma-V-MD series was added.

Module	Function Module/Slave	Status	Circuit No/Axi	sAddress	Motion Register	Register(Input/Output)	
Module			Start	supied circu	Motion Register	Disabled	Start – End
01 [CPU-201] :							
EXU-001							
PSA-12							
	01 CPU						
	02 218IFD		뮵 Circuit No1	1		Input	0000 - 07FF[H]
	03 🖃 SVC32		et Circuit No1	2	8000 - 8FFF[H]	Input	0800 - 0BFF[H]
	SGDV-MDA02**M3*		03[H]				
	01 🤖 Control Axis(Rotary)				8000 - 807F[H]	🔲 Input	
			(00[H])			🔲 OutPut	
8 원 00	02 🧰 Control Axis(Rotary)		 (01[H])		8080 - 80FF[H]	Input	
2 00 (a) CPU201[]	08 🧰 Control Axis(Rotary) 04 📾 Control Axis(Rotary)				8100 - 817F[H]	📄 Input	
8			(02[H])			🔲 OutPut	
					8180 - 81FF[H]	🔲 Input	
			(03[H])			🔲 OutPut	
	05 🧰 Control Axis(Rotary)				8200 - 827F[H]	🔲 Input	
			(04[H])			OutPut	
	06 🤖 Control Axis(Rotary)			8280 -		Input	
			(05[H])			OutPut	
	07 🤖 Control Axis(Rotary)				8300 - 837F[H]	Input	
			(06[H])			OutPut	
	08 🤖 Control Axis(Rotary)		(07[L])		8380 - 83FF[H]	Input	
			(07[H])			OutPut	

### [Support Version]

Controller

Controller	Support Version
MP3000 Series	It is not dependent on the version.
	XAbout the SigmaWin+ cooperation function via MP, it is due to support in Ver1.12.
MP2000 Series	It is not dependent on the version.
	%About the SigmaWin+ cooperation function via MP, it is due to support in Ver2.88.

#### **Option Module**

Module	Support Version
SVC-01	It is not dependent on the version.
	XAbout the SigmaWin+ cooperation function via MP, it is due to support in Ver1.12.

# No. 4 267IF-01 (CC-Link Master) module was added.

267IF-01 (CC-Link Master) module was added to the option module with which MP3000 series can be equipped.

Edit Online	Self Configuration	Det	tail - [C	CC-LINK-M]											
ect Setting Mead	Write MI modules	Fi	ile Edi	lit View											
Module	Function Module/Slave	PT;	#:	CPU#:							CIR#01	000080-	0184F		
	T direction module/ orave		etail Defi	finition Communic	ation status   Statio	n Status	Circuit T	est ]							
01 [CPU-201] :			00-Link \	Version Ver200	-										
EXU-001				ication Parameters											
PSA-12	_			sion Speed							No. of bits			12	8/8192
	01 CPU				1 OMbps 🖵	Output D	ata Refre	esh C	yole (•	Low C High	No. of words			2	0/2048
		N	No.ofret	tries	3 🗸	System E	irror: Cor	mmun	ications 🔎	Stop 🔿 Continue	(A) No. of rer	note I/O stat	ion		1/64
	02 218IFD	N	No.ofaut	tomatic recoveries	1 💌	CPU Stop	: Data O	lutput	G	Clear 🔿 Retain	(B) No. of rer	note device s	tation		2/42
8					, _	Receptio	n Error: (	Data I	nnut G	Olear C Retain	(C) No. of loc	al intelligent o	levice station		2/26
월 00 @ CPU201[]	08 🛨 SVC32					riecepilo	in Enror. I	Datan	input te	Great (C) roe (all r	(16*A)+(54	*B) + (88*C)		30	00/2304
			Slave All												
Ξ.	04 🛨 SVR32														
	05 M-EXECUTOR		А.,	V V Display	Occupied Stations										
	00 MEEAEOUTOR		ST		tation Type		Cyclic		No. of Oc cupied St	Data Points	Reserved/Err	Sending	Receiving	Scan C	
	06 UNDEFINED		No.	, °	cacion rype		ansio	n	ations	Data Fornts	or immunity	Condina	T COCOTO ING	ycle	word
= 01 💽 267IF-01[]	01 CC-Link-M			Ver. 1 remote I		•	1×	•		0 points 🛛 💌	•	0		Low 🚽	
				Ver. 1 remote o		•	1x	-		32 points 🔹		0		Low 💌	
6 02 UNDEFINED[				Ver. 1 local inte Ver. 2 remote o	elligent device sta lauies station		1x 1x	<b>•</b>		32 points 👻	· ·	64		Low -	
8 08 UNDEFINED[	-]		05		elligent device st			Ť		32 points 🗸	· ·	64		Low -	
02 UNDEFINED 03 UNDEFINED			Ĩ	1				-	· ·	1	· ·	I Ť	-		4
04 UNDEFINED			<u> </u>					_					_		
05 UNDEFINED			O-Link w	version e CC-Link version.											
02 UNDEFINED		lf.	fthe CC-		nged from Ver. 2.00 f	to Ver.1.10	, station:	s whe	re a Ver.2 de	vice has been allocat	ted at Station Type	for slaves will	be deleted, an	d will be ch	anged to
08 UNDEFINED		<u> </u>	tations.												
14 UNDEFINED		•				_			III						
15 UNDEFINED															
16 UNDEFINED		For	or Help,	press F1											

#### [Support Version]

Controller

Controller	Support Version				
MP3000 Series	Ver1.10 or later				
MP2000 Series	Ver2.86 or later				

**Option Module** 

Module	Support Version
267IF-01	Ver1.00 or later

### No. 5 The Task List function was added.

The function to monitor the driving status of the motion program was supported.

1. The function displays the name of program and step number when being executing it

The main program name under execution, the step number and the subprogram name called from the main program are displayed.

Task List 🔹 🕈 🛪 🗙	Start MPM001	MPM004
8	i 📰 😵 📆 🔍	🕒 🚽 Version7.00 🔹 🧖
Task List	LINE BLOCK	
G The running Motion programs     MPM001	1	VAR;
MPS002 [Block: 7]	2	END_VAR;
MPM004	4	PFORK Label1 Label2;
MPS005 [Block:7]	6	Label1:
The running Sequence programs	7	MSEE MPS002;
	8 3	JOINTO LabelX; Label2:
Call History	10 3	MSEE MPS003;
E MPS002 [Block: 7]	11 12 5	JOINTO LabelX; LabelX: PJOINT;

2. The function displays driving status of alarm generation etc.

The status is displayed by using the icon and balloon help of the driving status of the program under execution.

Setup Prog Ladder program	
Task List	[Operating Mode]
8	Running [Status]
Task List	Alarm(0x00000185)
🖃 🖾 The running N	///////////////////////////////////////
E 9, MPM001	
MPS002	[Block:7]
MPS003	[Block:7]

3. The function displays call history of program

The call history of the subprogram called from the main program is displayed.



Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.6 The maintenance function of the window layout was supported.

The function in which a customer's favorite window layouts, such as a window layout at the time of program development and a window layout at the time of debugging, can be maintained up to five was supported.

<u>W</u> ir	ndow <u>H</u> elp	7		
	Close All	)   B 🗆   🖽   🛄 📮	🛅 🔶 🕨	ີ ພີ ພີ ເ
	Window layou <u>t</u>	Save Layout	<u>≥ &gt; c#k , i i i</u>	🖩 💷 🖡 i 💥
	Horizontal view	R <u>e</u> store Layout 🕨	🕂 Layout 1	Ctrl+1
	Vertical view	Reset	🔁 Layout 2	Ctrl+2
	— Move to the previous tab		🕂 Layout 3	Ctrl+3
	Move to the next tab		🔁 Layout 4	Ctrl+4
~	 <u>1</u> Start		🔁 Layout 5	Ctrl+5
	<u>W</u> indows			

### [Operation]

It is possible to operate it from "Window layout" of "Window" menu.

The restoration of the layout is restorable in the operation of "Ctrl+1, 2, 3, 4, 5".

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 7 The representational function of the window layout was added.

The function which carries out "Horizontal view" and "Vertical view" was added to the modification method of the display of the window which displays Ladder program and Motion program.

O By pushing "Horizontal view" button, the piecewise representation of the window can be easily carried out to a horizontal direction.

O By pushing "Vertical view" button, the piecewise representation of the window can be easily carried out to a vertical direction.

#### [ The operation method ]

It chooses "window" menu => "Horizontal view " or " Vertical view".



Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 8 The system monitor function was strengthened.

The following function was added about the system monitor function.

1. The alarm integration management function

The system monitor function manages the error and the alarm that occurs by the controller and the SERVOPACK, and displays the cause and the correction of the alarm. Moreover, the alarm is displayed in the category based on the content of the alarm.

Category display of alarm				
Category	Content of alarm			
CPU	CPU error			
	Battery alarm			
Program	Ladder program error			
	Motion program alarm			
Module	Axis alarm (motion module alarm)			
	Servo alarm			
	I/O alarm (communication module)			

System Monitor				×
MP3000 RDY RUN ALM ERR BAT M-ALM	Alarm Classification Program	Alarm Code 0003H	Alarm Name integer operation - division e	rror
Monitor         Check CPU performance         Check alarms         Check alarms         Check alarm history	Cause/Correction – Cause Integer operation Correction Correct the ladde -Please push a jui	r program.	rrect the program of relevance.	1/1 12
Control	Troubleshooting -	Execution step	am where alarm occurred H where alarm occurred 7 where function was called	01

2. The status display function to observe error and alarm

The function to always observe the developmental state of the error and the alarm displayed in the statusbar was added.



3. The alarm history function (Only the MP3000 series).

The alarm history function to add newly was added as MP3000 series controller. The content of the alarm can be confirmed going back up to 100.

System Monitor		
MP3000 RDY	Alarm history	👩 Refresh 🛛 🏹 Clear
ALM ERR	Alarm category Alarm Code User Operation Errc A003H	e Alarm Name Time when error occurred Operation Error 2000.01.23 22:08:37
BAT M-ALM	I/O Error A101H	I/O Error 2000.01.23 22:13:26
Monitor	•	
🖟 Check CPU performance 🕞	Cause/Correction	1/1
o Check alarms     ▶	There is an operation error in	
🕒 Check alarm history 🛛 🛛	Correction	
Control	Correct the program. -Check the error code in SW00	0085.
CPU Control 🕞	Detail	occurred H01
	Execution step where alarm occ	curred

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 9 The Cross Reference function was strengthened.

The following function was added to the Cross Reference function.

- 1. Maintenance function of retrieval result history
- It is a function to maintain the retrieval result of the cross reference.



#### 2. Back or forward of result history function

It is a function that returns to the previous retrieval result, or advanced to the following result of the cross reference.

\$ <del>\$</del>	-		
o Write/R		MB000003   H02   0   NOC : NO Contact   Read	T I
	✓	MB000002   H01   0   NOC : NO Contact   Read	- 1
Read Write		MB000001   H   0   NOC : NO Contact   Read	
Read	_	Delete All History	

3. Maintenance function of execution existence of confirmation check

It is a function to maintain the check existence of the confirmed register in the check box.

Cr	oss Re	ference 1 [	MB000002-* : All p	rogram / Sea	rch Result 3]
Va	ariable	MB000002	2	Search	Setting
		Register	Program 📥	Execution I	Execution Step
Ξ	Same	Register			
		MB000002	H01	NOC : NO	0
		MB000002	H02	COIL : Coil	1
Ξ	Same	Memory Addr	ess		
		MW00000	н	LOAD : Int	2

4. "Read search" (Ctrl+Shift+T) and "Write search" (Ctrl+T) function

O "Read search" (shortcut key: Ctrl+Shift+T) searches only the register currently used for readings, such as a register currently used for conditional instructions such as NO contact, or a register currently used for the Src side of STORE command.

O "Write search" (shortcut key: Ctrl+T) searches only the register currently used for writing, such as a register currently used for the output command of Coil command etc., or a register currently used for the Dest side of STORE command.

After searching "read search" and "write search", it is possible to refer to using "Search Next" (shortcut key: F3) and "Search Previous" (shortcut key: Shift+F3) smoothly.

#### [ The operation method ]

"Debug" menu => "Cross Reference" => "Read search" (Ctrl+Shift+T) or "Write search" (Ctrl+T) is chosen.

<u>D</u> ebug <u>W</u> indow <u>H</u> elp	
Cross Reference	X. Cross Reference Ctrl+R
Scheck for Multiple Coils	Wri <u>t</u> e search Ctrl+T
<u>F</u> orce Coil List	<u>R</u> ead search Ctrl+Shift+T

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 10 The Transfer function has been improved.

In the Transfer, the setting method of the transfer file type of "Program" and "Local register comment" were changed. The "Comment" was changed into the "Global register comment", and the item for "Local register comment" was newly added.

- The "Comment" was changes into "Global register comment."

- About the "Local register comment", it changed so that it might arrange to the "Program" subordinate.

Transfer Program - V	Transfer Program - Write into Controller			
	Source Project File : CPU-201 (ECO	_Ver72	5.YMW7)	
<u>S</u> tart			0%	
🔁 Batch	Individual			
Transfer file type		Г		
System Config	✓ System Configuration The following files will be transferred. System Definition			
	register comments. local register comments in controller.	Scan Time Definition Module Configuration Data Trace Data Logging Ladder Program (High-speed/Low-speed/Start/		
🗹 Register			Interrupt/Function) Motion Program (Main/Sub)	
Global register	comment		Sequence Program (Main/ Sub) Local Comment (D Register/ # Register/ X Register/ Y	
Transfer option		L		
Write the parar	meter into the SERVOPACK.			
Save to flash a	fter transferring to the controller.		Options Close	

#### [MPE720 Ver7.24 or before]

Transfer file	Check box	Operation
Program	Those with a check	"Program" is transmitted to destination.
Comment	Those with a check	"Local register comment" is transmitted to destination.

Transfer file	Check box	Operation
Program	Those with a check	"Program" is transmitted to destination.
Comment	With no check	"Local register comment" of destination will be in an empty state.

Transfer file	Check box	Operation
Program	With no check	"Program" is not transmitted to destination.
Comment	Those with a check	"Local register comment" is not transmitted to destination.

#### [MPE720 Ver7.26]

Transfer file	Check box	Operation
Program	Those with a check	"Program" is transmitted to destination.
Update local register comments.	Those with a check	"Local register comment" is transmitted to destination.

Transfer file		Check box	Operation	
Program		Those with a check	"Program" is transmitted to destination.	
Do not leave local register		Those with a check	"Local register comment" of destination will be in an empty state.	
comments in Controller.				

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

# No. 11 The search in project function was strengthened.

In the search in project function, "Instruction search" function was added.

- The object of the instruction search is Ladder instruction.

9	Gearch in project		×
ſ	Variable Instruction	Address	
	Instruction	MSG-RCV V	Search All
			Cancel
	Target Program	🔘 Text 🗸 🗸	
		O Program	
		⊕- ☑ Ladder program ⊕- ☑ Motion program ⊕- ☑ Sequence program	
	Output log at Sea	arch 2	

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 12 The replace in project function has been improved.

Until now, in "Replace in project" function, because the replace operation of the register of the CP ladder was not able to be done, it has improved it.

Replace in the project	t			<b>X</b>
Register Address				
Search Register	MB000000		•	Replace All
Replace Register	MB000001	•	•	Cancel
	from search registers to replace registers. h register comments.	Target Program		
	Topistor comments.	<ul> <li>Text</li> <li>Program</li> </ul>		
		Header pr     ⊕ ✓ Ladder pr     ⊕ ✓ Motion pr     ⊕ ✓ Sequence     ☐     ✓ Sequence     ☐	ogram	
When the popen again	program is opened by Engineering Builder to the re n after closing the program or executing.	placing execution, the p	rogram is not updated auton	natically. Please

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 13 The editing operation of two or more programs has been improved.

It has improved to be able to operate the following operation at the same time about two or more programs.

- 1. Deletion operation of program
- 2. Set and cancel operation of program password
- 3. Enable and Disable operation of program



[Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

# No. 14 The "Display in axis selected" has been improved.

It has been improved so that the Logical Axis Name assigned by the Group Definition displays in the "Display in axis selected" of the Test Run function, the Axis Setup Wizard function, and the Module Configuration.

1 2 *	Address	į	A1 Circuit#01 Axis#01 SGDV-MDA02**M3* [Initial value]	A1 Gircuit#01 Axis#01 SGDV-MDA02**M3*	B1 Circuit#01 / SGDV-MDA	Axis#02 \02**M3*	C1 Circuit#01 SGDV-MD	A×is#03 A02**M3*
			Select All Reflectio	Update	Update		Update	
	OW8000		] 0000[H	[H]0000[H]		0000[H]		{]0000
	OW8001		] 0000[H	]0000[	-1]	0000[H]		{]0000
	OW8002		] 0000[H	]0000[	-1	0000[H]		{]0000
	OW 80 0 3		] 0011[H	0011[	-1	0011[H]		0011[ŀ
	OW8004		] 0033[H	] 0033[	-1]	0033[H]		0033[}
. € 5 : Function setting 3	OW 80 05		] 0000[H	]0000[	-1	0000[H]		{]0000
⊕ 6 : M-III Vendor Specific Servo Comma····	OW8006		] 0000[H	]0000[	-1	0000[H]		{]0000
8 : Motion command	OW 80 08		0 : No Command	l 0 : No Comman	nd 0	: No Command	0	I : No Commar
⊕ 9 : Motion command control flag	OW8009		] 0000[H	]0000[	-1]	0000[H]		1]0000
10 : Motion subcommand	A0 08 WO		0 : No Command	l 0 : No Comman	nd 0	: No Command	0	I:No Commar
12 : Torque/Thrust reference setting	OL800C		] 0[0.01%	] 0[0.01	KI I	0[0.01%]		0[0.01:
44 C 10 5 57 50 5 70			1 10000000100100	100000001	a	10000000100		1000000.01

Controller	Support Version	
MP3000 Series	It is not dependent on the version.	
MP2000 Series	It is not dependent on the version.	

### No. 15 The print function has been improved.

In the program print function, to print the following item, it has improved it.

- 1. Drawing Tree
- 2. Drawing List
- 3. Function Configuration
- 4. Tuning Panel
- 5. Update History

ľ	Print	X		
1				
	Program			
l	= ☑ MP2300S [MP2300S]			
I	🔤 🕼 Ladder program			
	Printing Options			
	Specify the drawing printing options.			
1	🛛 🖾 📄 Drawing Tree 🔅 Tuning Panel			
	V C Drawing List Update History			
	Function Configuration			
	OK Cancel			
l	Detail Print Cano	:el		

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 16 The recovery function of the project file was supported.

When the project file of relevance was started when MPE720 terminated abnormally by some factors, the function to restore the project data working last time was added.

MPE720	Ver.7
8	MPE720 Ver. 7 shut down abnormally last time. The data being worked on has been backed up in project "C:¥Users¥futikami¥Desktop¥backup0_MP2300S3.YMW". Before clicking [OK], quit Configurator/Engineering Manager if it is running. * If you continue without quitting the application, unexpected operations may occur.
	<ul> <li>Open the backed up project file.</li> <li>Open the specified project file.</li> </ul>

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 17 The default value of the Group Definition (Axis Variable) has been improved.

Until now, when the Group Definition (Axis Variable) was started, 3 axes (A1, B1, C1) were displayed. It has improved so that the slaves assigned in the Module Configuration is checked, and the default value may be set up



Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 18 The operation of the Module Configuration (MC-Configurator) has been improved.

In the Module Configuration screen (MC-Configurator), it has improved about the following operation.

1. The improvement of the Module Configuration

In the Module Configuration, the function which moves a station number was added by drag-and-drop operation about the slave devices assigned to motion control modules, such as SVB-01 and SVC-01.

2. The improvement of the exclusive control of write-in operation of the Module Configuration screen and parameter screens (Fixed Parameter screen etc.).

When parameter screen was being opened, the operation of editing and writing in the Module Configuration screen is impossible. So, this has been improved.

3. The improvement of the number of the maximum indication axes of servo parameter / servo monitor.

Until now, although the number of the maximum indication axles of the servo parameter / servo monitor had become to 4 axes, restriction of the number of the maximum indication axles was removed.

#### 4. The improvement of servo monitor.

It changed so that a check might be attached to the check box of a parameter to monitor in Servo Monitor screen.

#### 5. The tab display of parameter screen

It has improved so that the tab of the selected parameter screen may be displayed by list about the tab display of Setting Parameter, Monitor Parameter, Servo Parameter and Servo monitor.

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 19 The communications setting screen has been improved.

The following improvement was executed in the Ethernet port on the communications setting screen.

#### 1. Ping command issue function

The Ping command issue function is a function in which the Ping command is published to the controller set as the "Target IP address" and it can be checked whether Ethernet communication is effective

#### 2. Initialize port function

It is a function to initialize the Ethernet communication port when the phenomenon is generated though the port initialization function might not be able to be connected when trying to connect it with a different controller who has same IP address.

Communications	Setting	×
	Set the communication setting Communication port ETHERNET[2] (IP:192.168.1.7) Gen  IP Setting	Connection Setting Cancel Delete
	Manual settings         Target IP address       192       168       1       .       1         Search and set       Search       Search       . <td< td=""><td>Ping Initialize Port</td></td<>	Ping Initialize Port

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 20 The default value of the Variable Display Format was changed.

The default value of the "Variable Display Format" of Variable window was changed. It can change on the variable tab of Environment Setting.

【 MPE720 Ver7.24 or before 】 "Comment: Variable (Register)"

### 【 MPE720 Ver7.26 】 "Variable (Register): Comment"

#### [ Modification procedure ]

The "property" of a context menu is chosen in Variable window, and it can change on "Environment Setting" screen.



Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No. 21 The starting timing of the Communication Platform was changed.

The starting timing was changed so that the Communication Platform might be started at MPE720 Ver7 start-up. Until now, since the Communication Platform was started to the timing on which the communication connection button was pushed, there was a case where communication went wrong, at the time of the 1st communication connection, without completing starting of the Communication Platform.

[Support '	Version
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Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

# No.22 The "IMPORT", "EXPORT", "IMPORTL", and "EXPORTL" were added to the System Structure.

The "IMPORT", "EXPORT", "IMPORTL", and "EXPORTL" were added to the System Structure of the variable window.

#### [ The operation method ]

"Global Variable" => "Address" is chosen in Variable window, and "Add" of a context menu is chosen.

🔠 Variable De	finition	_	
Variable Name		System Struct	ure 🔘 User Structure
Register	MA00000 -	Structure Name	PI_W : PI Control (integer type 🔻
Comment		Variable Name	VANA_CHAR_READ_OUT : Char A VANA_DIFF_DETECT_IN : Differ
		RLY	VANA_DIFF_DETECT_OUT : Diff
		RLY.IRST	VANA_CALIBRATION_REGIST_I
		Кр	VANA_CALIBRATION_IN : Calibi VANA ALIGNMENT REGIST IN
		Ki	VANA_ALIGNMENT_IN : Alignme
		Ti	VANA_ALIGNMENT_OUT : Alignr
		IUL	NVRES_BLOB_AREA_RSLT_IN : R
		ILL	VRES_BLOB_AREA_RSLT_OUT : VRES_BLOB_SHAPE_RSLT_IN : I
		UL	VRES_BLOB_SHAPE_RSLT_INT
		LL	VRES CHAR READ RSLT IN : F
		DB	NVRES_CHAR_READ_RSLT_OUT
		Y	VRES_DIFF_DETECT_RSLT_IN :
		Yi	VRES_DIFF_DETECT_RSLT_OUT SLAU L : Linear Accelerator 2 (c
		IREM	COUNTER : COUNTER
			IMPORT_IN : Import Input
			IMPORT_PARAM : Import Param
			IMPORT_OUT : Import Output
			EXPORT_IN : Export Input EXPORT PARAM : Export Param
	· · · · · · · · · · · · · · · · · · ·		EXPORT OUT : Export Output
			IMPORTL_IN : Import Extend In
	Structure <<		IMPORTL_PARAM : Import Exte
			IMPORTL_OUT : Import Extend EXPORTL_IN : Export Extend In
	Option OK Cancel	•	EXPORTL_IN : Export Extend In EXPORTL_PARAM : Export Exte
		,	EXPORTL_OUT : Export Extend

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.23 The MC-Configurator start operation of the project to which the project password is set has been

#### improved.

When the project file to which the project password was set was opened and MC-Configurator was started, the input of the project password had become the operation demanded again, but since the password was entered once, it has improved so that an input may not be required.

Project Password	Ľ	
Password		
.ogon Password		
User name		
Password		

#### [Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.24 The message was added to the Trace Manager function.

When the trace manager started, the message of the range of use was added because the register type (G register), the data type (Quad and Double type), and ranges of the register (register of MW65535 or more) added in the MP3000 series were not able to be used.



Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.25 The Real-Time trace function has been improved.

In the Real-Time trace function, since the delete function of the trace definition was not able to be used, this has been improved.



#### [Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.26 The conversion operation from the MAL file to the YMW file has been improved.

In the conversion operation from the MAL file to the YMW file, since the error message of "0x80010105" was displayed and conversion might go wrong when combine symbols and comments was chosen, this has been improved. – When "Import of Ver5 CMT file" operation is executed, it is the same.

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.27 The MC-Configurator start operation has been improved.

The error message is displayed when MC-Configurator starts and because it was not likely to be able to start, this has been improved.



[Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.28 The compile operation of the ladder program has been improved.

In the ladder program, because the circuit did not operate correctly when the array register or the subscript is used for the rising edge no contact instruction, it has improved it to output the error message when such a circuit is united.

- [ object instruction ]
- 1. Rising Edge NO Contact
- 2. Rising Edge NC Contact
- 3. Falling Edge NO Contact
- 4. Falling Edge NC Contact
- 5. Rising Edge Detection Coil
- 6. Falling Edge Detection Coil

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.29 The compile operation of the IMORTL/EXPORTL command has been improved.

- 1. Since there was a phenomenon used as a compile error when the project file of MP3000 series was newly created and the IMORTL/EXPORTL command was used for the Ladder program in the off-line. So, this has been improved.
- 2. When IMPORTL and EXPORTL of the ladder instruction was ordered, because the error of "8104 hex: Parallel execution channel number out of range error" might occur if 1–32767 was set to the transfer size, this was improved.

[Support Version]

Controller	Support Version
MP3000 Series	Ver1.08 or later
MP2000 Series	Unsupported.

#### No.30 The compile operation of the motion program has been improved.

The error message "0xA0A058EC: Failed to compile for user structure." is displayed when the motion program was compiled when the name of "ch" was used for the structure name of the user structure and it was not likely to be able to compile, this has been improved.

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.31 The Cross Reference operation of the Local registers has been improved.

If the address type local register was searched with the cross reference function, since local registers other than the drawing of targeted search might be displayed on search results. So, this has been improved.

#### Example)

In H drawing, "DB00000" is used for the coil command.

In H01 drawing,  $\rm ``DA00000''$  is used for the MSEE command.

In the Cross Reference function, when "DB00000" of H drawing is searched, "DA00000" currently used in H01 drawing will be displayed on the Same Memory Address of search results.

Start										
2	mbooooo	1	1	1	1		1	- m0000001		_
4/2	4 db0									
3	MB000000							MB000001		
676										
4	MB000000							MB000001		
8/8			1	1				<u> </u>		
	DB000100							DB000101	i - I	
5										
							🔺 [WLFQD] Src	[WLFQD]Dest	<b>.</b>	
6				1	1	STORE	DL00010	ML00010		
12/12	2							0 0		
							▲ [WI FON] Sro	TWI FONT Nect		
F1	F2 F3	F4	F5 LDP	(F6)	F7 LDPI	F8 LDF	F9 LDFI	FID	11	Fl
Cross Refe	erence 1 [DB000101-	H / Search Resu	ult 2]							
Variable	DB000101	Search	Setting.							
R	Register	Program					Execution Inst	truction	Exe	ecut
🗮 Same Re										
	08000101 emory Address						COIL : Coil			
	emory Address DL00010	н					LOAD : Intege	er Entry	1	2
							Long Timege	,,	-	÷.,

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.32 The operation of the "Search in Project" function has been improved.

In the "Search in Project" function, when the bit type register currently used in CP Ladder was searched, since there was a phenomenon in which search results were displayed in the range of the word type register. So, this has been improved.

#### Example)

In H drawing of CP Ladder, "MB00000" is used for the NO Contact command and "MB00001" is used for the coil command. In the Search in Project (Variable tab) function, if "MB00000" is searched, "MB00000" and "MB00001" will be displayed on search results.

Secup Programming Promit		
Engineering builder Print builde	Search in project	×
Ladder • म ×		
₽1 =	Variable Address	
Program	Search Variable MB000101	Search All
ECO_Ver725 [CPU-201]	Target Program 🔘 Text	Cancel
🛄 🗁 Ladder program	Program     Program	Cancer
😑 📅 High-speed		
H01	🗄 V Ladder program	
📕 H02	😥 🗹 Sequence program	
H03 : CPLadder :		
···· ⊞ Low-speed		
⊞ 🛅 Start 		
	Output log at Search 2	
Ladder C Motion System		
Search 1		
Start the search 'MB000101' [ H,H01,H02,I	403 ]	
H03 : [CPStep 0001] : MB000101 H03 : [CPStep 0007] : MB000101		
End of search, 2 founds,		

#### [Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.33 The operation of "Using register" display of the register list has been improved.

In the function of the register map of the register list, because there was a phenomenon that an unused register is displayed as a use register about local registers, this has been improved.

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

# No.34 The "0.0001%" was added to "Speed unit selection" of the Setting parameter of PO-01 module.

The "Preset value =3 (0.0001%)" was added to "Speed unit selection" (OWxx03 Bit0-3) of the "Function setting 1" of the Setting parameter of PO-01 module.

1 2 *	Address	Axis0501 Circuit#05 Axis#01 Pulse Axis
⊕ 0 : Run command setting	OWA000	0000[H]
😑 3 : Function setting 1	OWA003	0011[H] 🛄
[Bit:0-3]Speed unit selection	OBA0 03 0	1 : 10 în reference unit/min
[Bit:4-7]Acceleration/Deceleration_u···	OBA0 03 4	1 : ms
[Bit:8-B]Filter type selection	OBA0038	0 : Filter none
Edit Axis0501 Circuit#05 Axis#01	I Pulse Axis	H)
9     3 : Function setting 1     10		
1t [Bit:0-3]Speed unit selection		
2 1 : 10 n reference unit/min		
21 0 : reference unit/sec		n]
21 1:10 n reference unit/min		e]
3: 3 : 0.000 1%		[e]
54		s]
5t 0 : Filter none		s]
58 0011 H		s] n]
51		
60 OK	Ca	ncel Apply hal
61		e]
62 ACTIVITY STREET		

#### [Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.35 The display of the detailed definition screen of the AI-01 and AO-01 modules has been improved.

In the detailed definition of AI-01 and AO-01 of the module configuration definition, because the "unit display" character piece and was displayed, this has been improved.

[Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

#### No.36 The transfer operation has been improved.

Because transmission might go wrong when individual transmission of the transfer function in the project file which set up the logon user name of 16-byte length, this has been improved.

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.37 The operation of the axis variable comment has been improved.

Because the comment was not correctly displayed when the comment of 32 bytes is set to the axis variable comment, this has been improved.

#### [Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.38 The operation of the trigger waiting state of the Real-Time trace function has been improved.

In the Real-Time trace function, because there was a phenomenon that the error message is displayed when it passed for a definite period of time in the state of the waiting for a trigger, this has been improved.

[Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.39 The print function has been improved.

Because D register comment used in the CP ladder was not occasionally printed, this has been improved.

[Support Version]

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

### No.40 The print of constant variable (C register) has been improved.

In the constant variable (C register) of MPE720 Ver7, because there is a phenomenon that the print manager is frozen if the Float type register is added to the constant variable, this has been improved.

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.