

Upgrade Information of MPE720 Version 7.52

1. Added and Improved Functions

1.1 Version 7.52 Upgrade Information

Items added and features improved from MPE720 version 7.51 to version 7.52 are as follows.

No.	Feature	Classification
1	Added support for SVF-01.	New function
2	Added support for the linking electronic cam tool function.	New function
3	Added support for import / export of motion programs.	New function
4	Improved #register list conversion.	Improving
5	Improved the input / output definition of the ladder function.	Improving
6	Improved the transfer when project file extension is lowercase.	Improving
7	Improved the saving project file after importing huge comment list.	Improving
8	Improved the hexadecimal input of the tuning panel.	Improving
9	Improved compilation of SFORK instruction in motion program.	Improving

(*): 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)

【DVD Media Version】

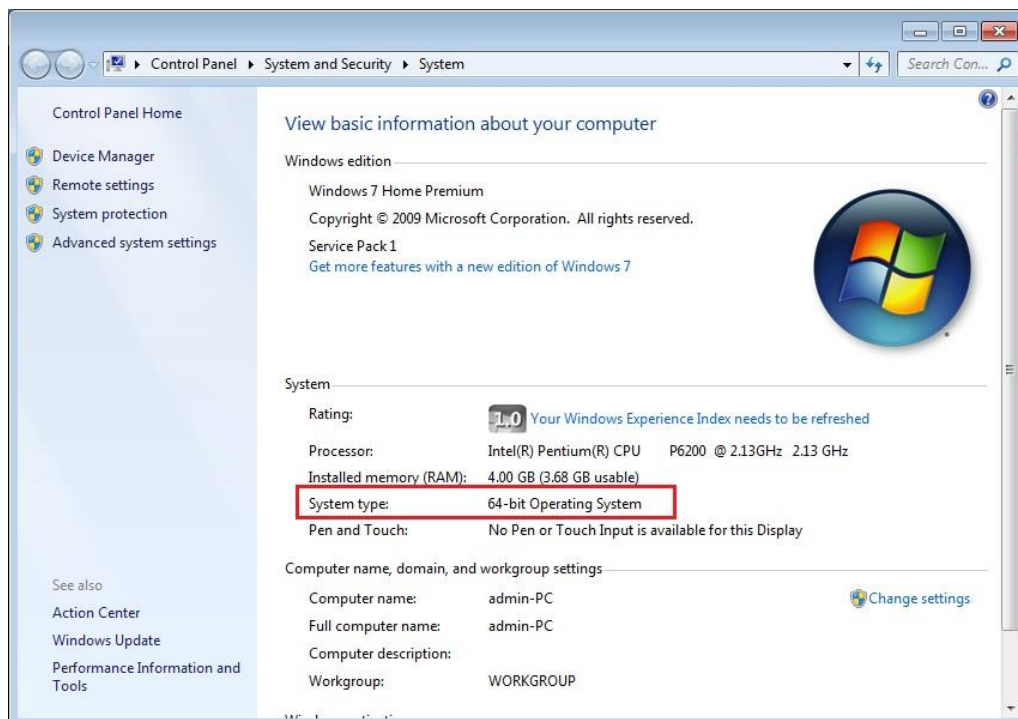
D(*5):\Tools\CleanUp\MPE720Ver7_x86.bat (32bitOS)

D(*5):\Tools\CleanUp\MPE720Ver7_x64.bat (64bitOS)

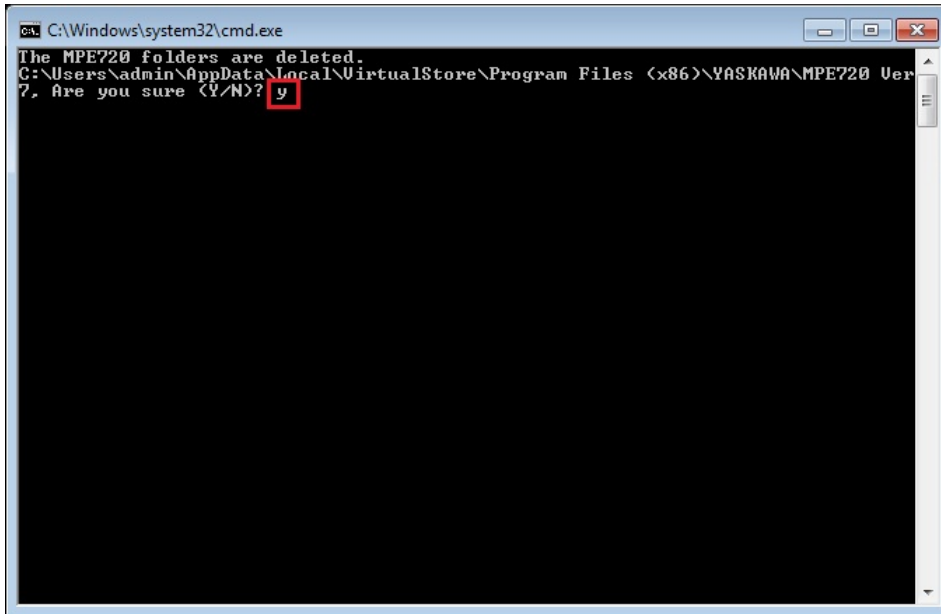
2. The copied batch file is performed.

MPE720Ver7_x86.bat (32bitOS)

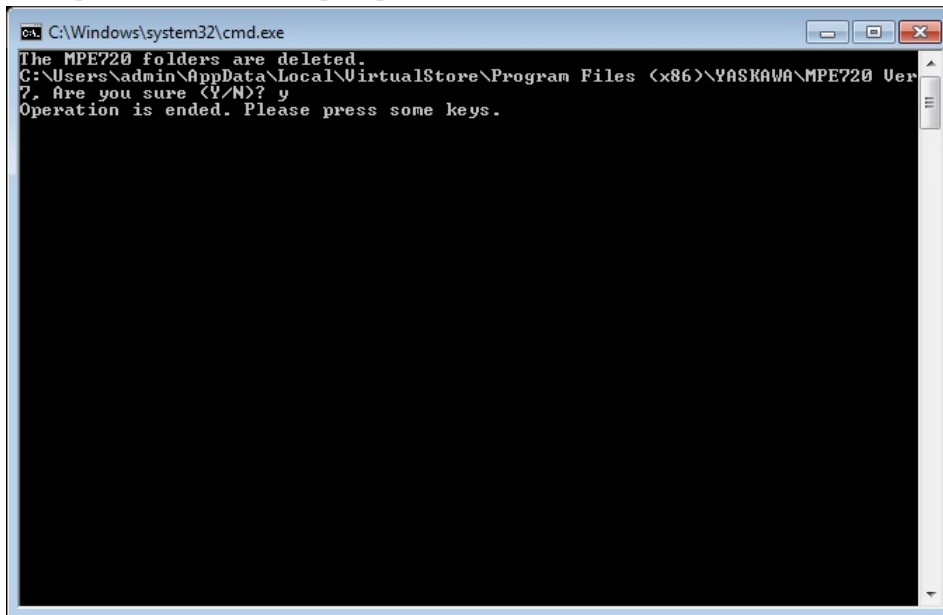
MPE720Ver7_x64.bat (64bitOS)



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 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】

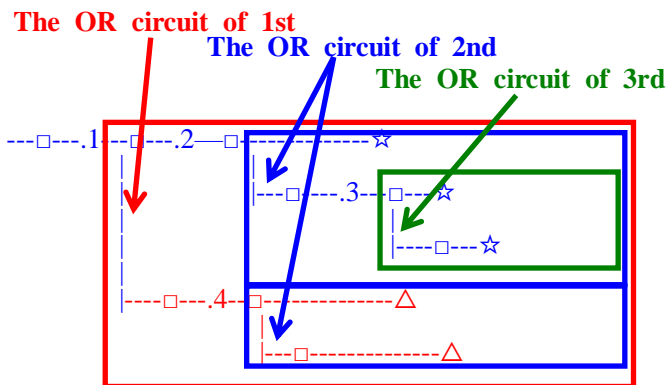
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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 1st class must operate essentially in response to the conditional instruction before the OR circuit of 1st 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 language.

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.

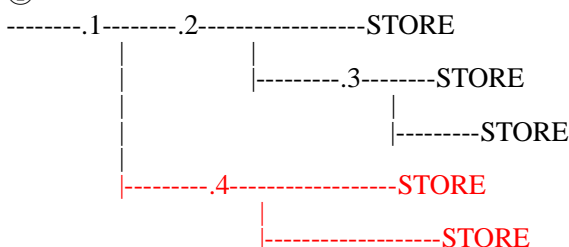
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
[NO Contact
STORE	STORE instruction
()	Coil

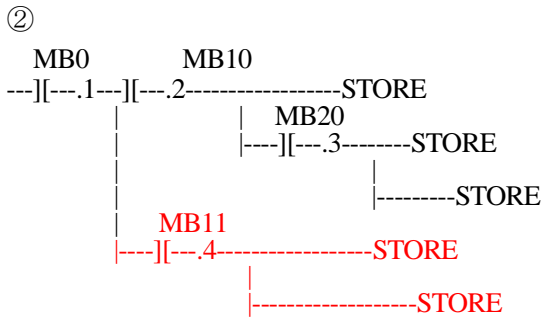
<NG Pattern>

①



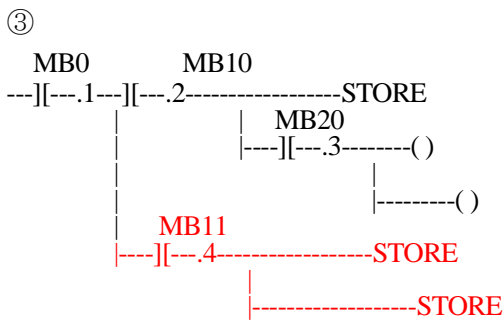
This pattern is minimum circuit pattern.

This is NG.



It is NG even if the minimum circuit pattern has conditional instructions (NO Contact etc.).

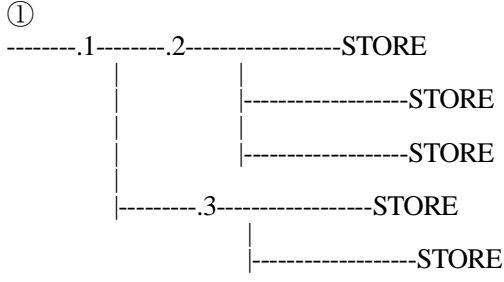
This is NG



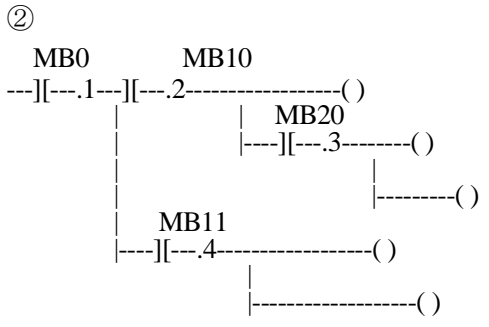
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

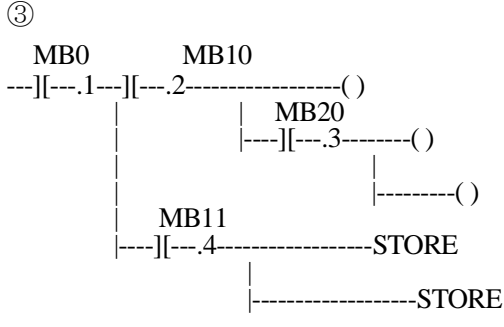
<OK Pattern>



Since it is the OR circuit of 2nd, it is OK.



Since it is the coil altogether, it is OK.



Since it is the coil altogether, it is OK.

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
8	MPE720 version 7.26 upgrade information	version 7.24→version 7.26
9	MPE720 version 7.27 upgrade information	version 7.26→version 7.27
10	MPE720 version 7.28 upgrade information	version 7.27→version 7.28
11	MPE720 version 7.29 upgrade information	version 7.28→version 7.29
12	MPE720 version 7.30 upgrade information	version 7.29→version 7.30
13	MPE720 version 7.31 upgrade information	version 7.30→version 7.31
14	MPE720 version 7.33 upgrade information	version 7.31→version 7.33
15	MPE720 version 7.34 upgrade information	version 7.33→version 7.34
16	MPE720 version 7.35 upgrade information	version 7.34→version 7.35
17	MPE720 version 7.36 upgrade information	version 7.35→version 7.36
18	MPE720 version 7.37 upgrade information	version 7.36→version 7.37
19	MPE720 version 7.38 upgrade information	version 7.37→version 7.38
20	MPE720 version 7.39 upgrade information	version 7.38→version 7.39
21	MPE720 version 7.40 upgrade information	version 7.39→version 7.40
22	MPE720 version 7.41 upgrade information	version 7.40→version 7.41
23	MPE720 version 7.42 upgrade information	version 7.41→version 7.42
24	MPE720 version 7.43 upgrade information	version 7.42→version 7.43
25	MPE720 version 7.44 upgrade information	version 7.43→version 7.44
26	MPE720 version 7.45 upgrade information	version 7.44→version 7.45
27	MPE720 version 7.46 upgrade information	version 7.45→version 7.46
28	MPE720 version 7.47 upgrade information	version 7.46→version 7.47
29	MPE720 version 7.50 upgrade information	version 7.47→version 7.50
30	MPE720 version 7.51 upgrade information	version 7.50→version 7.51

2. Description

No. 1 Added support for SVF-01.

It was supported MECHATROLINK-4 compatible motion module SVF-01.

- 1) The SVF-01 module can be assigned and the transmission parameters of MECHATROLINK-4 can be set on the module configuration screen.
- 2) MECHATROLINK-4 compatible servos (SGD7S-**** 4 **) and IO (MDF2310) can be assigned as SVF-01 slaves, and fixed / setting parameters can be set.
- 3) It was supported all SVF-01 functions related to slave axes such as test run, axis monitor, and axis variable.

Module	Function Module/Slave	Status
01 [CPU-301(16axes)] : ---		
00 CPU301(16)[Driving]	01 CPU	Driving
	02 218IFD	Driving
	03 + SVC	Driving
	04 + SVR	Driving
	05 M-EXECUTOR	Driving
	06 -- UNDEFINED --	----
	07 -- UNDEFINED --	----
01 SVF-01[Driving]	01 - SVF 16	Driving
	01 - SGD7S-****4*	No Alarm
02 -- UNDEFINED --		

[Supported Versions]

○Controller

Controller	Supported Firmware Version
MP3000 Series	1.48.
Σ-7 Series	Not available.
MP2000 Series	Not available.

○Motion module

Module	Supported Firmware Version
SVF-01	1.00.

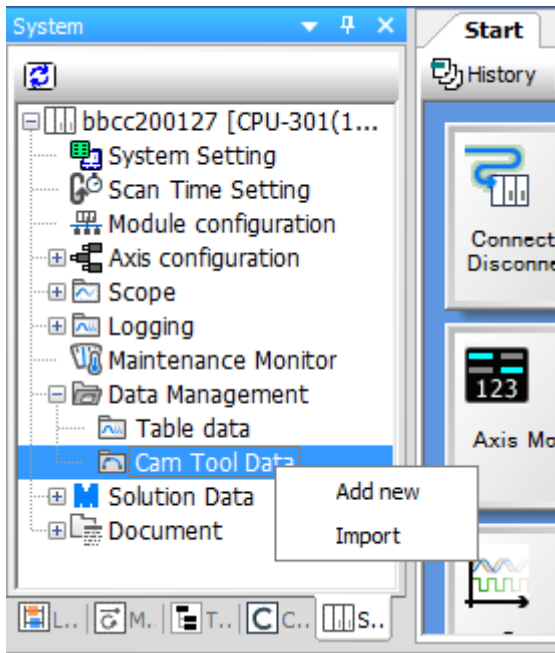
○MECHATROLINK-4 Slave

Slave	Model	Supported Firmware Version
Servo	SGD7S-****4**	0030_0000
I/O	MFD2310	1.00

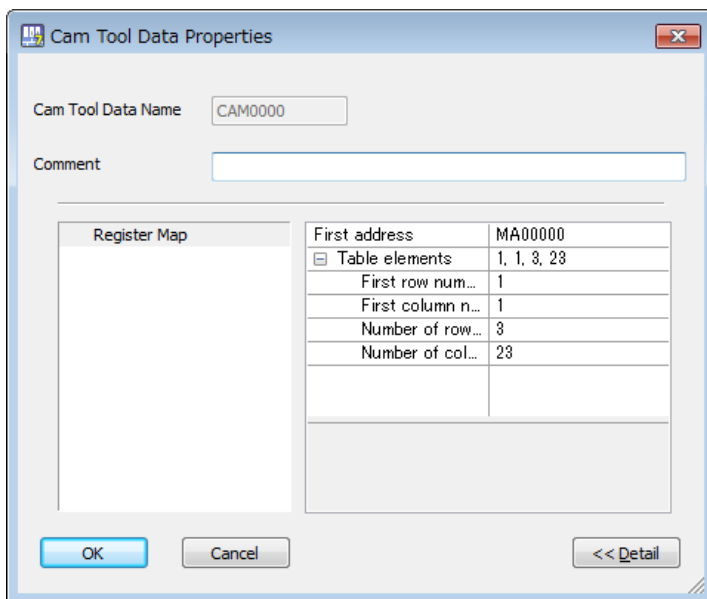
No. 2 Added support for the linking electronic cam tool function.

The electronic cam tool has been linked with the cam tool data in the controller / project file.

- 1) From the cam tool data in the system sub window, the electronic cam tool can be called to create, save, and edit new cam tool data. The created data is saved in the table data format in the controller or project.



- 2) By mapping the saved cam tool data to the register, it can be used from a ladder program etc. without transferring it from the electronic cam tool.



[Supported Versions]

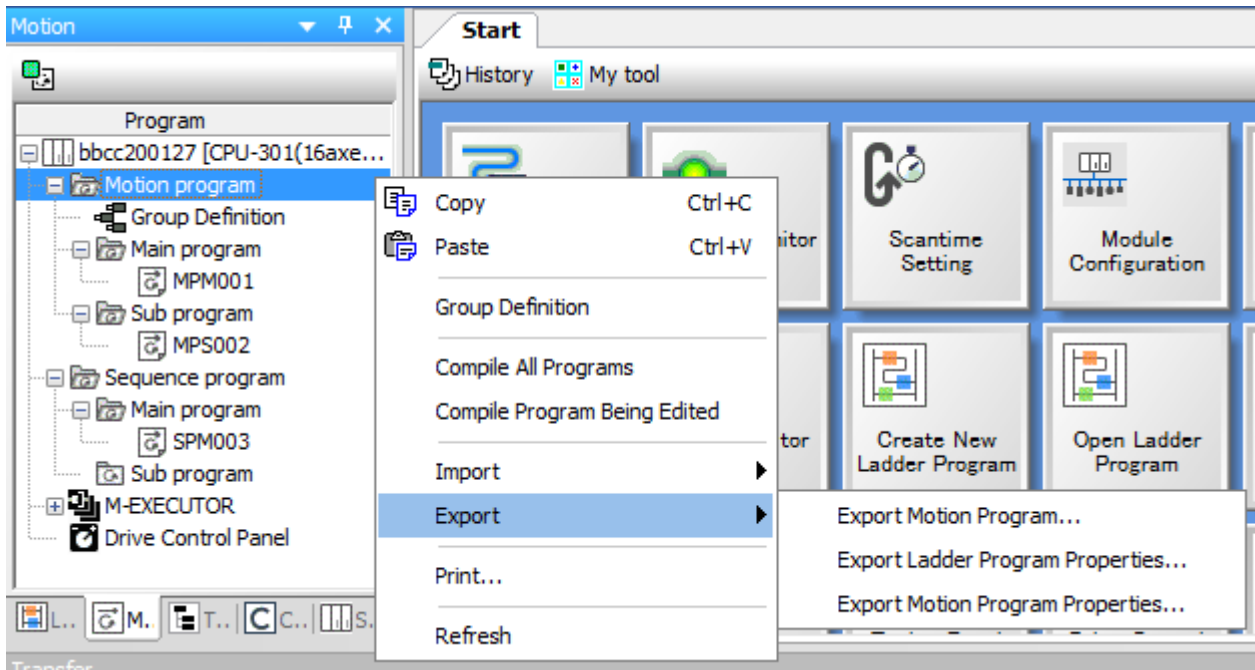
○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 3 Added support for import / export of motion programs.

Added import / export function of motion (sequence) program.

- 1) Motion programs and sequence programs can be exported as text files. (Offline only)
- 2) Group definitions can be exported as CSV files. (Offline only)
- 3) Motion programs and sequence programs can be imported from the text files. (Offline only)
Only programs that already exist in the project can be imported.
- 4) Group definitions can be imported from the CSV file. (Offline only)



Result of export:

\$GRPDEF.csv	2020/01/2
\$MPM001.txt	2020/01/2
\$MPM002.txt	2020/01/2
\$MPS002.txt	2020/01/2
\$SPM003.txt	2020/01/2
exportIndex.txt	2020/01/2

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 4 Improved #register list conversion.

When using a #register list in Drawing properties of CP ladder and the constant table (#register) is undefined, the #register list could not be used after CP ladder conversion. Therefore it has been improved that # register constants in the register list can be automatically newly registered as the definition of the constant table by CP ladder conversion.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 5 Improved the input / output definition of the ladder function.

In some case the input / output definition of the ladder function could not be changed. (not reflected on the reference of other ladders) So it has been improved that the definitions can be changed.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 6 Improved the transfer when project file extension is lowercase.

When the project file extension (YMW7, YMW) was set to lowercase (ymw7, ymw), transfer (and compare) processing did not work normally. So it has been corrected.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 7 Improved the saving project file after importing huge comment list.

MPE720 Ver7 might be down when overwriting the project after importing a huge comment list. This has been fixed.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 8 Improved the hexadecimal input of the tuning panel.

In the current value input of the tuning panel, when the view definition was set to hexadecimal, it was not possible to input the some value including "E". So it has been fixed.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.

No. 9 Improved compilation of SFORK instruction in motion program.

When online compiling a motion program including SFORK command with bit-type polynomial AND condition, an error was occurred. Therefore it has been improved.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
MP3000 Series	Not dependent on the controller version.
Σ-7 Series	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.