

Upgrade Information of MPE720 Version 7.62

1. Added and Improved Functions

1.1 Version 7.62 Upgrade Information

Items added and features improved from MPE720 version 7.60 to version 7.62 are as follows.

No.	Feature	Classification
1	Added support for YRM-X.	New function
2	Added support for Sigma-X.	New function
3	Added support for 263IF-01 Ver1.06.	New function
4	Improved the logging function.	Improving
5	Improved the search in project function	Improving
6	Improved the number of retry to slave of SVF-01.	Improving
7	Improved the failure to restart when the user memory is abnormal.	Improving
8	Improved the ladder compiler.	Improving
9	Improved the motion compiler.	Improving
10	Improved the flash save during executing motion program.	Improving
11	Improved the print builder.	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】

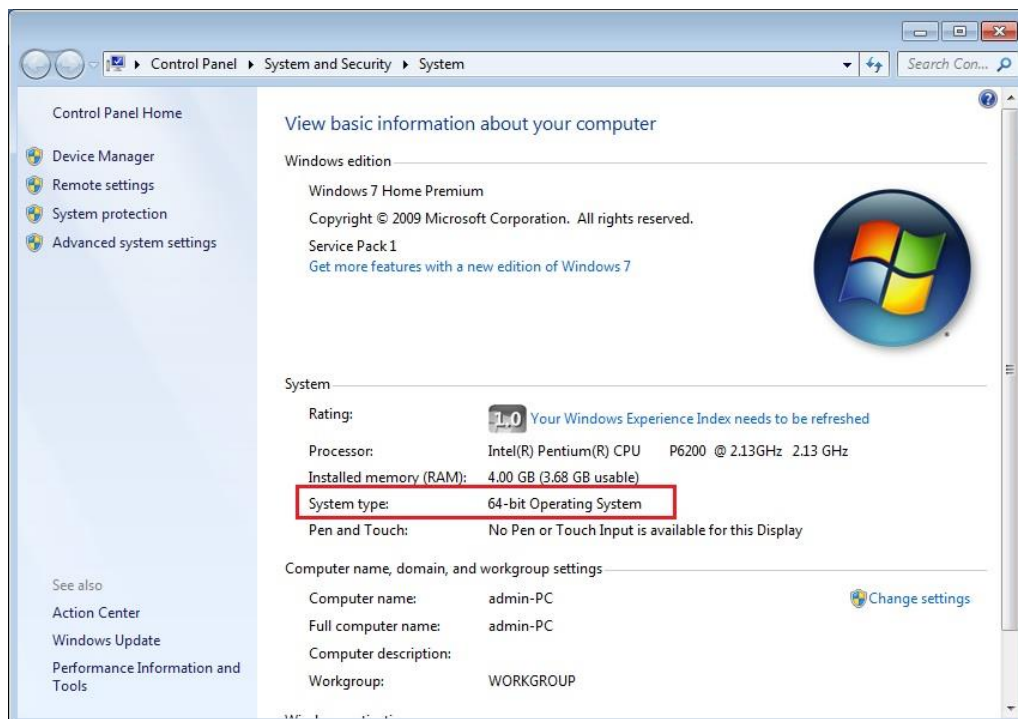
D(*5):\Tools\CleanUp\MPE720Ver7_x86.bat (32bitOS)

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

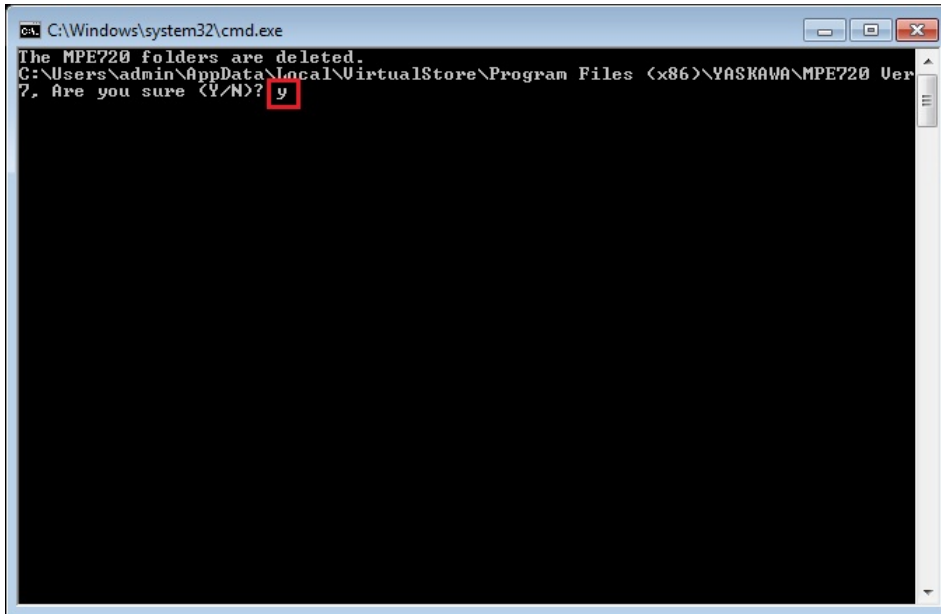
2. The copied batch file is performed.

MPE720Ver7_x86.bat (32bitOS)

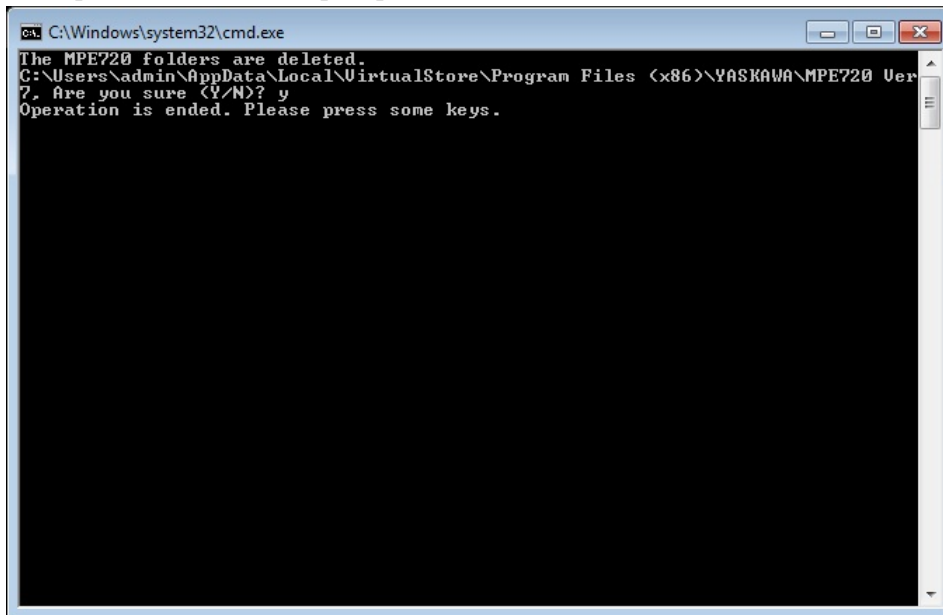
MPE720Ver7_x64.bat (64bitOS)



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】

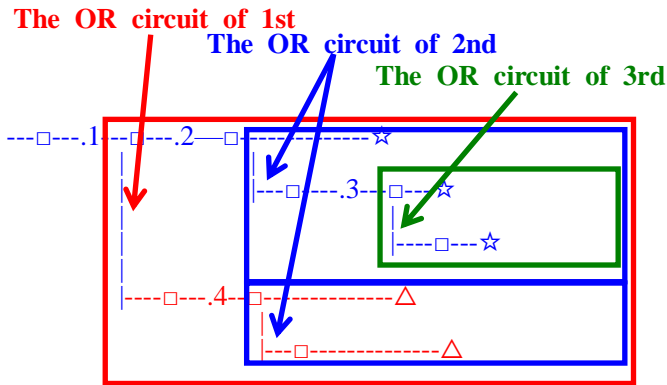
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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.

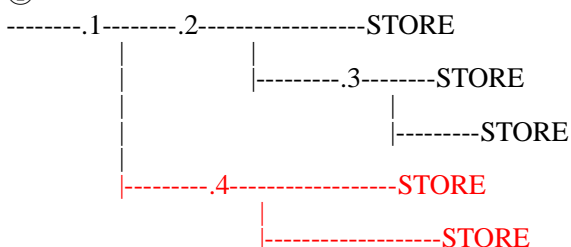
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
[NO Contact
STORE	STORE instruction
()	Coil

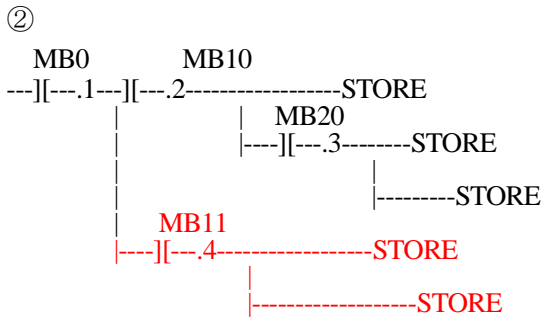
<NG Pattern>

①



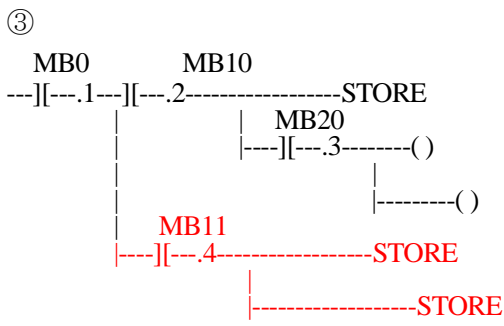
This pattern is minimum circuit pattern.

This is NG.



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

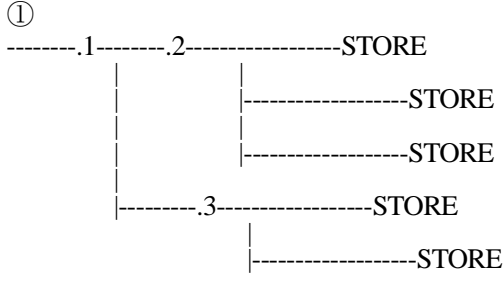
This is NG



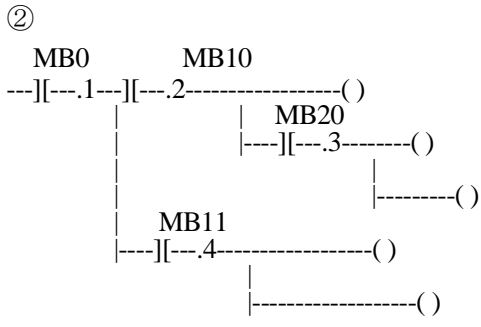
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

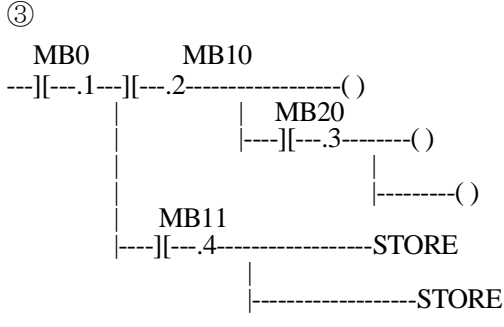
<OK Pattern>



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

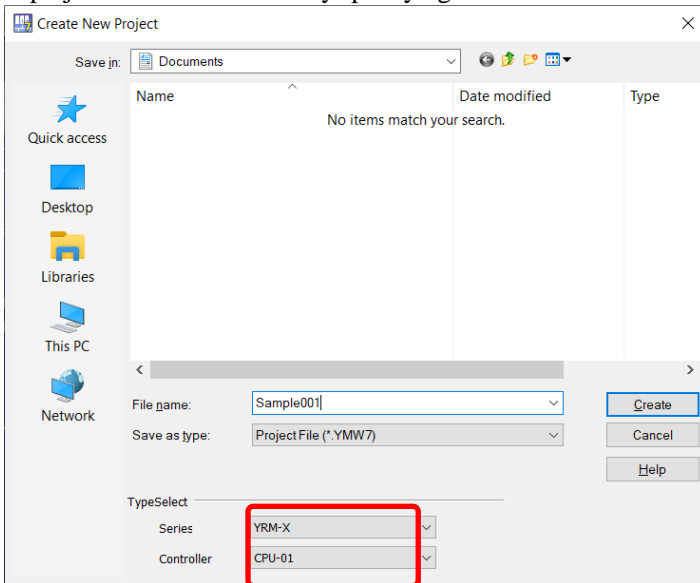
No.	Upgrade Information	Remarks
1	MPE720 version 7.11 upgrade information	version 7.10→version 7.11
2	MPE720 version 7.13 upgrade information	version 7.11→version 7.13
3	MPE720 version 7.14 upgrade information	version 7.13→version 7.14
4	MPE720 version 7.20 upgrade information	version 7.14→version 7.20
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
31	MPE720 version 7.52 upgrade information	version 7.51→version 7.52
32	MPE720 version 7.60 upgrade information	version 7.52→version 7.60

2. Description

No. 1 Added support for YRM-X.

Supports YRM-X controller.

- 1) A project file can be created by specifying the series name "YRM-X" and model "CPU-01".



- 2) It can be connected to the YRM-X controller for engineering.

Please refer to the YRM-X manual about the details.

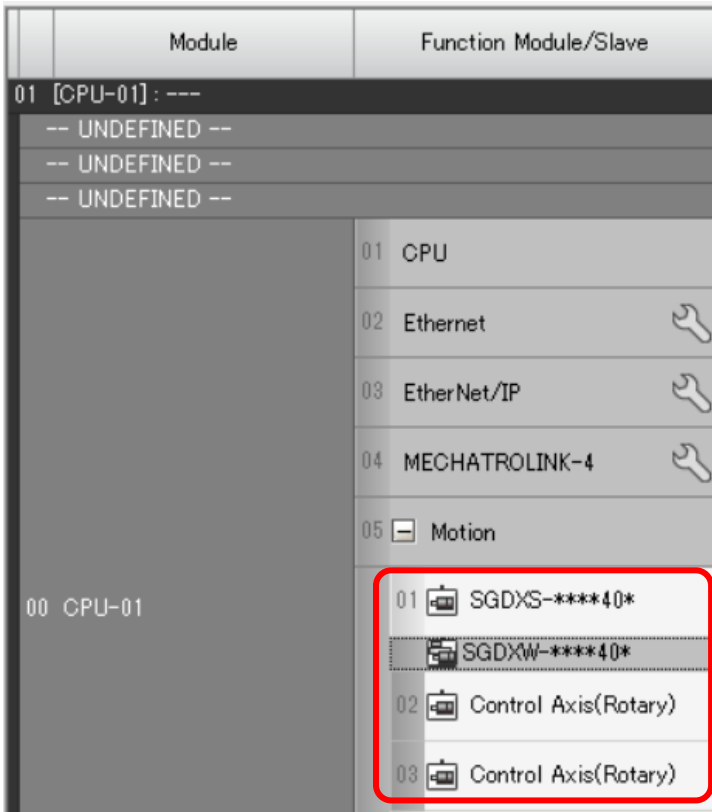
[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	1.00

No. 2 Added support for Sigma-X.

1) Sigma-X can be assigned in the module configuration definition of MC-Configurator, and used as slave.



[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	1.00
YRM-7	Not available.
MP3000 Series	1.51
Σ-7 Series (build-in SVC)	Not available.
MP2000 Series (build-in SVC)	Not available.

○Motion module

Module	Supported Firmware Version
SVF-01	1.00
SVC-01	1.24

○ServoPack

Supported Servo
SGDXS-****40*
SGDXW-****40*

No. 3 Added support for 263IF-01 Ver1.06.

- 1) The operation mode can be selected on network parameter screen of 263IF-01. (Ver1.06 or later)

Detail - [EtherNet/IP]

File Edit View

PT#: -- CPU#: --

Network Parameter | Connection List | I/O Status | Module Information

IP Address (0 - 254)

Subnet Mask (0 - 255)

Gateway IP Address (0 - 255)

Equipment Name

Engineering Port When MPE720 is connected, the port number used as an engineering port is set.

Operation mode [Explanation about Operation mode](#)

[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	Not dependent on the controller version.
YRM-7	Not dependent on the controller version.
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.

○Option module

Module	Supported Firmware Version
263IF-01	1.06

No. 4 Improved the logging function.

The following improvements have been made to the logging function.

- 1) Files can be stored separated into subfolders.
- 2) Update date/time of files can be set to the controller calendar setting.
- 3) Setting for start from previous index number after power supply is turned on.

File output [Close]

Number of output files

No restriction (1 - 32767)

When the total number of log files exceeds the maximum, any new log file will overwrite the oldest log file.

Set the number of output files to 4000 or less for the following saving destinations:

- Built-in RAM disk
- FTP server
- PC (MotionAPI)

File overwrite settings

Specify the operation when a file with the same name exists.

Overwrite

Stop logging

Subfolder Settings

Stores files separated into subfolders

Subfolder File Limit (50~2000)

Update Date/Time Setting

Set update date/time of files to controller calendar settings

Setting for Index No. When Overwriting Files

Start from previous index no. after power supply is turned ON

OK Cancel

[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	Not available.
YRM-7	Not available.
MP3000 Series	1.51
Σ-7 Series	1.14
MP2000 Series	Not available.

No. 5 Improved the search in project function.

The following improvements have been made to the search in project function.

- 1) Enabled to search the comment text in the ladder program and motion program.
- 2) Enabled to search the line comments (program comment, rung comment) of ladder program.

Search in project

Variable Instruction Address **Comment Text** Line Comment

Find What Search All

Target Program Current Window [H] Cancel

Text H

Program

- Ladder program
- Motion program
- Sequence program

Match case Use wild cards

Find whole items only Register compensation

Output log at Search 2

Comment Text

Search in project

Variable Instruction Address **Comment Text** Line Comment

Target Program Current Window [H] Search All

Text H Cancel

Program

- Ladder program

Display First Line of Line Comment Only

Output log at Search 2

Line Comment

[Supported Versions]

oController

Controller	Supported Firmware Versions
YRM-X	Not dependent on the controller version.
YRM-7	Not dependent on the controller version.
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 number of retry to slave of SVF-01.

A check box for enabled message communication has been added to the detailed definition screen of SVF-01 and Motion module of YRM-X. The number of retry to slave is set due to this check box status, the transmission cycle, the number of connection, and the transmission size of the slave axis.

Detail definition:

Detail - [MECHATROLINK]

File Edit View Window

PT#: -- CPU#: --

Transmission Parameters

Protocol: MECHATROLINK-4

Master/Slave: Master

My station address: 0x0001

Transmission Cycle: 250us

Enabled message communication

Number of retry to slaves: 0

Number of connection: 8

Slave synchronous function: Disable

Slave detection waiting time: 0sec

Transmission size:

01	SVF16	A7FF[H]	<input type="checkbox"/> Input <input type="checkbox"/> OutPut	1C80 - 207F[H]	1024	
02	SVF-01[-----]	01	SGD7S-****4*	A07F[H]	<input type="checkbox"/> Input <input type="checkbox"/> OutPut	24

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM-X	1.00
YRM-7	Not available.
MP3000 Series	1.51
Σ-7 Series	Not available.
MP2000 Series	Not available.

○Motion module

Module	Supported Firmware Version
SVF-01	1.00

No. 7 Improved the failure to restart when the user memory is abnormal.

If the flash was saved even though user memory error occurred in the MP3000 controller, a startup failure occurred when the power was turned on again.

Therefore, when the user memory is abnormal, an error message is displayed when saving to flash to prompt the user to initialize the memory.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM-X	-
YRM-7	-
MP3000 Series	1.52
Σ-7 Series	1.14
MP2000 Series	-

No. 8 Improved the ladder compiler

The following improvements have been made to the ladder compiler.

- 1) Special characters such as "-" can be entered by single character in the string set command (STRSET).
- 2) When there is a comparison instruction in a ladder with a branch and the other elements are coils, and the register referenced in the comparison instruction is set in the coil of the previous branch, the value referenced in the comparison instruction is delayed by one scan. The phenomenon has been improved.
- 3) Improved the phenomenon that the instruction using the work register does not function normally under certain conditions.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM-X	Not dependent on the controller version.
YRM-7	Not dependent on the controller version.
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 the motion compiler.

The following improvements have been made to the motion program.

- 1) Improved the phenomenon that the loop combining WHILE-WHILEX does not exit even if the conditions are met, and the motion program starts from the beginning.
- 2) Improved the phenomenon that the motion program converted from MP900 is not displayed in the program tree.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM-X	Not dependent on the controller version.
YRM-7	Not dependent on the controller version.
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. 10 Improved the flash save during executing motion program.

Flash save became to be possible even while the motion program is running.

[Supported Versions]

○Controller

Controller	Supported Firmware Versions
YRM-X	Not dependent on the controller version.
YRM-7	Not dependent on the controller version.
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. 11 Improved the print builder.

When printing MP2200-02, MP2200-03, and MP2200-04, there was a phenomenon that the print builder did not start, so this has been improved.

[Supported Versions]

○Controller

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