

## **Upgrade Information of MPE720 Version 7.64**

### **1. Added and Improved Functions**

#### **1.1 Version 7.64 Upgrade Information**

Items added and features improved from MPE720 version 7.63 to version 7.64 are as follows.

No.	Feature	Classification
1	Added MLx functions for collision detection.	New function
2	Added support for 264IF-02 module.	New function
3	Improved the EDS file reading.	Improving
4	Improved the Axis Setup Wizard.	Improving
5	Improved not to down after cross reference.	Improving
6	Improved to check .NET Framework 4.6.2 when installing MPE720 Ver.7.	Improving
7	Improved the Engineering builder.	Improving
8	Improved to open Engineering builder or other screens after INIT start.	Improving
9	Improved the ladder compiler.	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】

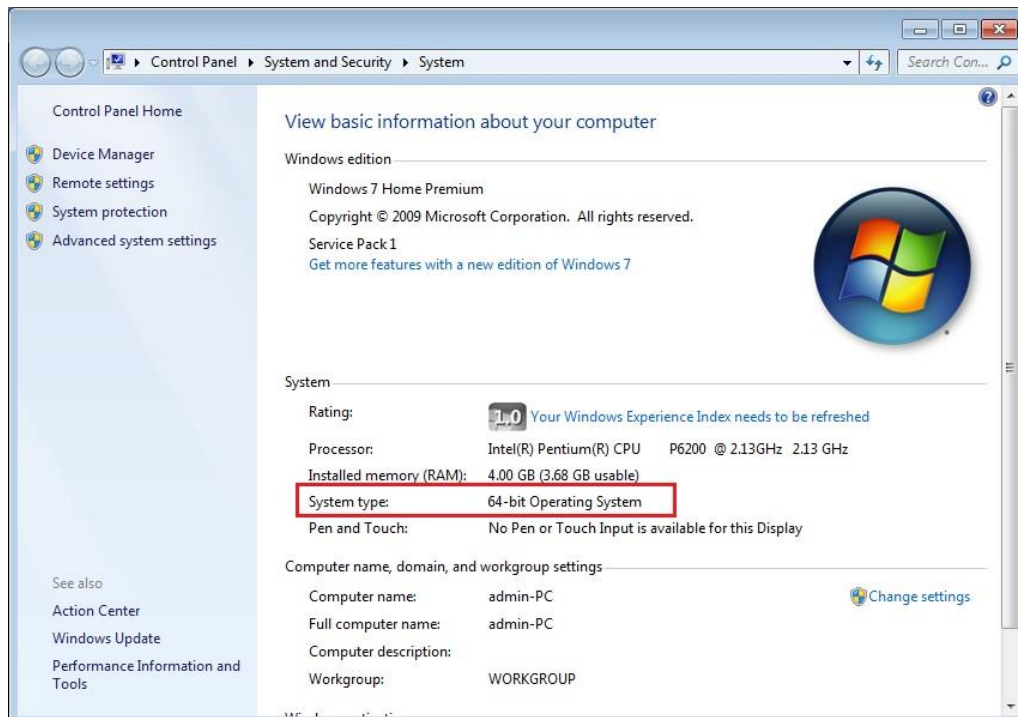
D(\*5)\Tools\CleanUp\MPE720Ver7\_x86.bat (32bitOS)

D(\*5)\Tools\CleanUp\MPE720Ver7\_x64.bat (64bitOS)

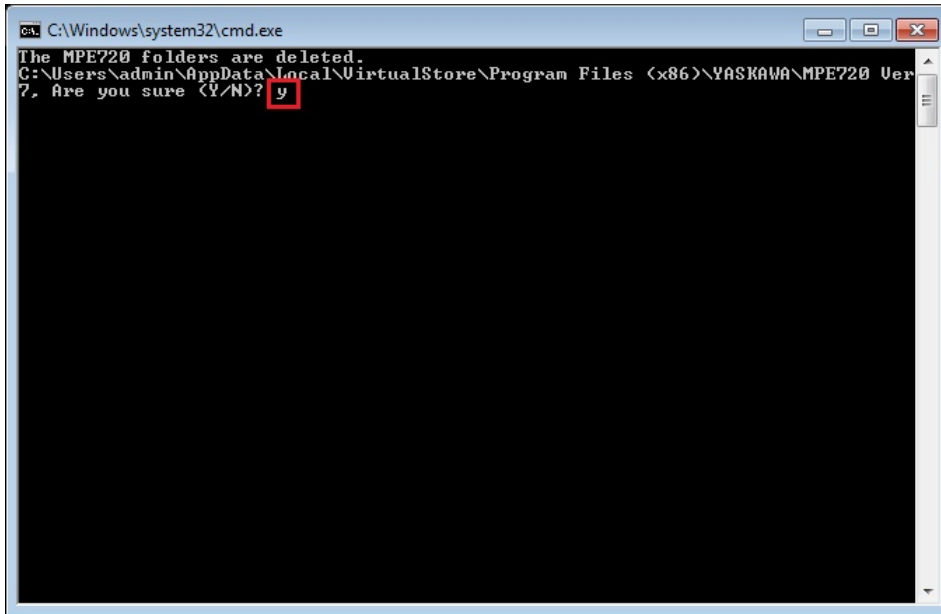
2. The copied batch file is performed.

MPE720Ver7\_x86.bat (32bitOS)

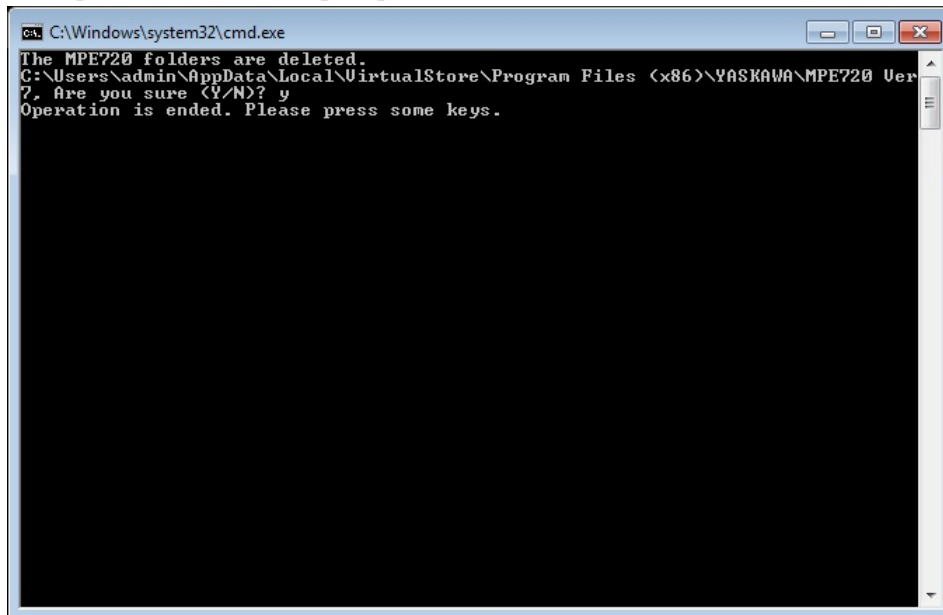
MPE720Ver7\_x64.bat (64bitOS)



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】

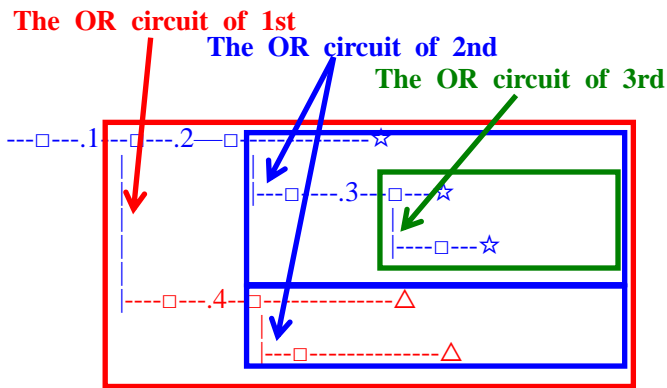
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

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

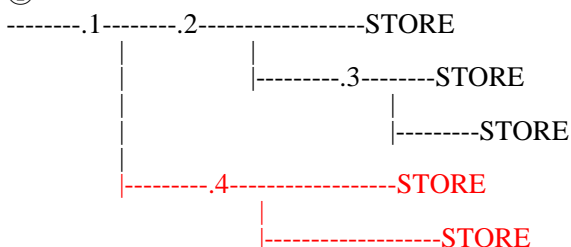
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
[	NO Contact
STORE	STORE instruction
()	Coil

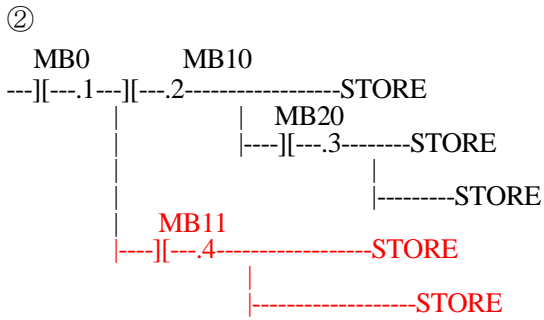
<NG Pattern>

①



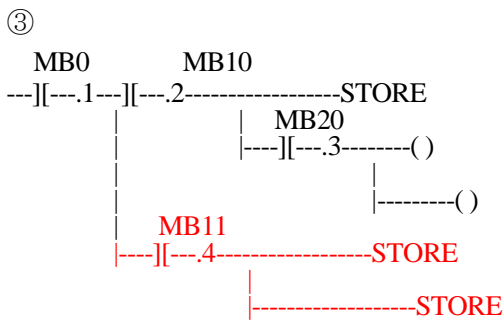
This pattern is minimum circuit pattern.

This is NG.



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

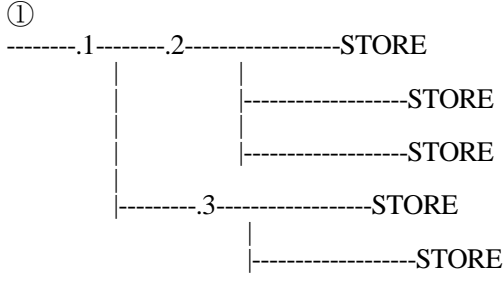
This is NG



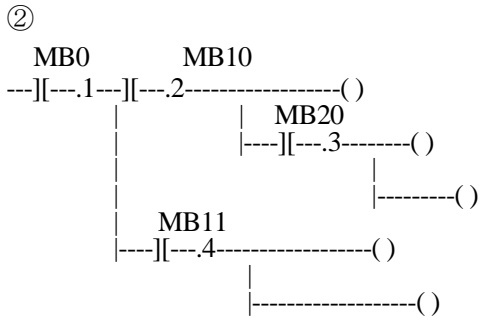
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

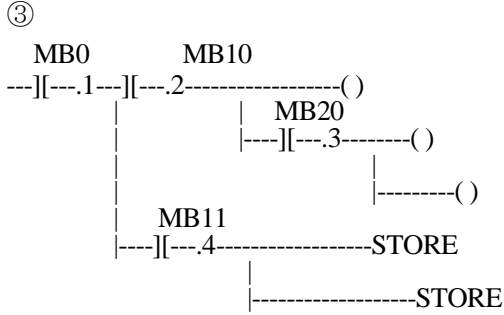
<OK Pattern>



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



Since it is the coil altogether, it is OK.



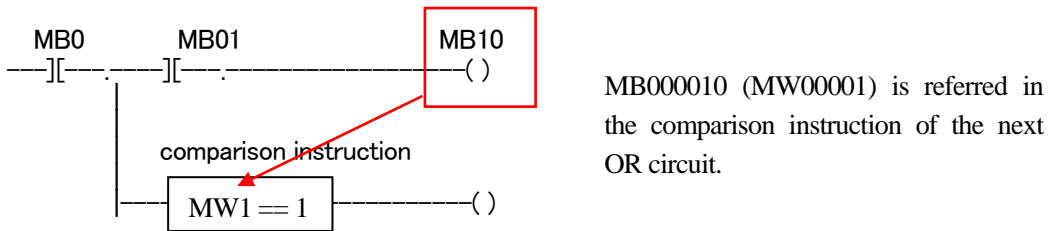
Since it is the coil altogether, it is OK.

## 【About compile with a comparison instruction in branch】

In the Ladder program of MPE720 Ver7 before MPE720 Ver7.63, when a comparison instruction is used in branch, the following phenomena may occur.

<Phenomena>

When the circuit containing the following pattern was created, the value of the register set in the upper OR circuit must be reflected to the comparison instructions in the lower OR circuit in the same scan. However, there was a phenomenon that it was reflected in the next scan.



<Measures>

When a phenomenon occurs, please carry out re-compile about the Ladder program in MPE720 Ver7 after MPE720 Ver7.64. Or please carry out again “Compile All Programs” of “Compile” menu. Also, about these programs that include circuits with this pattern, the number of internal steps will change in Ver7.64 or later, so when cross-reference is performed in a project created in an earlier version, there is a possibility of jumping to an unintended location. In this case, please recompile too.

## 1.2 Past Upgrade Information

No.	Upgrade Information	Remarks
1	<a href="#">MPE720 version 7.11 upgrade information</a>	version 7.10→version 7.11
2	<a href="#">MPE720 version 7.13 upgrade information</a>	version 7.11→version 7.13
3	<a href="#">MPE720 version 7.14 upgrade information</a>	version 7.13→version 7.14
4	<a href="#">MPE720 version 7.20 upgrade information</a>	version 7.14→version 7.20
5	<a href="#">MPE720 version 7.21 upgrade information</a>	version 7.20→version 7.21
6	<a href="#">MPE720 version 7.23 upgrade information</a>	version 7.21→version 7.23
7	<a href="#">MPE720 version 7.24 upgrade information</a>	version 7.23→version 7.24
8	<a href="#">MPE720 version 7.26 upgrade information</a>	version 7.24→version 7.26
9	<a href="#">MPE720 version 7.27 upgrade information</a>	version 7.26→version 7.27
10	<a href="#">MPE720 version 7.28 upgrade information</a>	version 7.27→version 7.28
11	<a href="#">MPE720 version 7.29 upgrade information</a>	version 7.28→version 7.29
12	<a href="#">MPE720 version 7.30 upgrade information</a>	version 7.29→version 7.30
13	<a href="#">MPE720 version 7.31 upgrade information</a>	version 7.30→version 7.31
14	<a href="#">MPE720 version 7.33 upgrade information</a>	version 7.31→version 7.33
15	<a href="#">MPE720 version 7.34 upgrade information</a>	version 7.33→version 7.34
16	<a href="#">MPE720 version 7.35 upgrade information</a>	version 7.34→version 7.35
17	<a href="#">MPE720 version 7.36 upgrade information</a>	version 7.35→version 7.36
18	<a href="#">MPE720 version 7.37 upgrade information</a>	version 7.36→version 7.37
19	<a href="#">MPE720 version 7.38 upgrade information</a>	version 7.37→version 7.38
20	<a href="#">MPE720 version 7.39 upgrade information</a>	version 7.38→version 7.39
21	<a href="#">MPE720 version 7.40 upgrade information</a>	version 7.39→version 7.40
22	<a href="#">MPE720 version 7.41 upgrade information</a>	version 7.40→version 7.41
23	<a href="#">MPE720 version 7.42 upgrade information</a>	version 7.41→version 7.42
24	<a href="#">MPE720 version 7.43 upgrade information</a>	version 7.42→version 7.43
25	<a href="#">MPE720 version 7.44 upgrade information</a>	version 7.43→version 7.44
26	<a href="#">MPE720 version 7.45 upgrade information</a>	version 7.44→version 7.45
27	<a href="#">MPE720 version 7.46 upgrade information</a>	version 7.45→version 7.46
28	<a href="#">MPE720 version 7.47 upgrade information</a>	version 7.46→version 7.47
29	<a href="#">MPE720 version 7.50 upgrade information</a>	version 7.47→version 7.50
30	<a href="#">MPE720 version 7.51 upgrade information</a>	version 7.50→version 7.51
31	<a href="#">MPE720 version 7.52 upgrade information</a>	version 7.51→version 7.52
32	<a href="#">MPE720 version 7.60 upgrade information</a>	version 7.52→version 7.60
33	<a href="#">MPE720 version 7.62 upgrade information</a>	version 7.60→version 7.62
34	<a href="#">MPE720 version 7.63 upgrade information</a>	version 7.62→version 7.63

## 2. Description

### No. 1 Added MLx functions for collision detection.

As ladder instruction, added the following MLx functions for collision detection.

- MlxRobotWriteLimitStatus
- MlxRobotReadLimitStatus
- MLxRobotMultiAxesReleaseBrake
- MlxRobotGetBrakeGroupInfo

[Supported Versions]

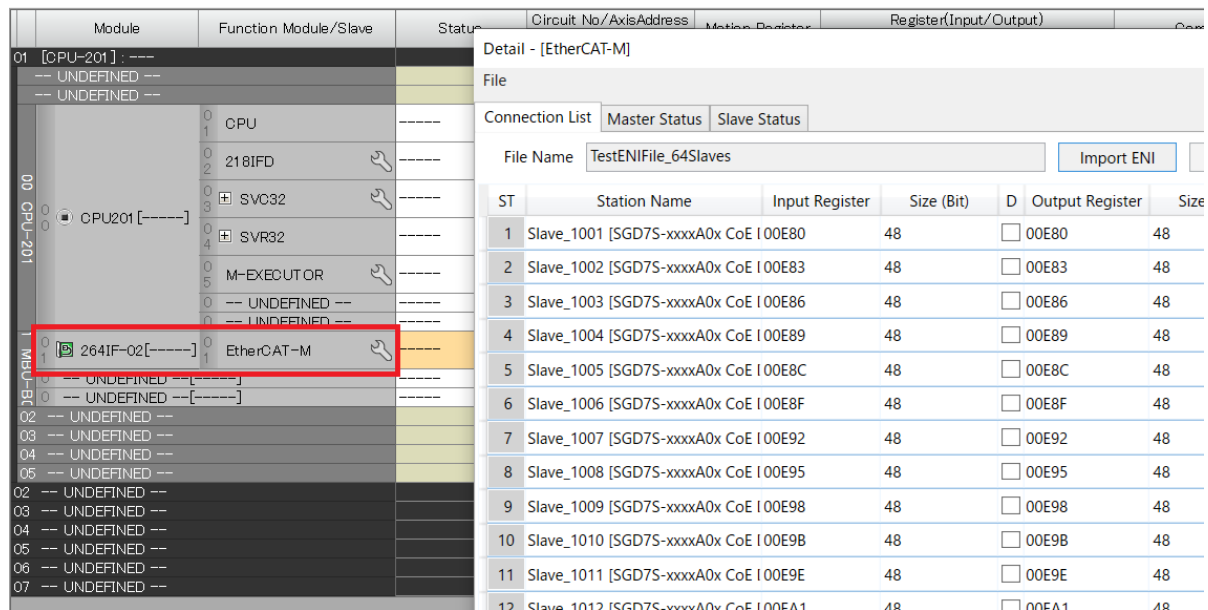
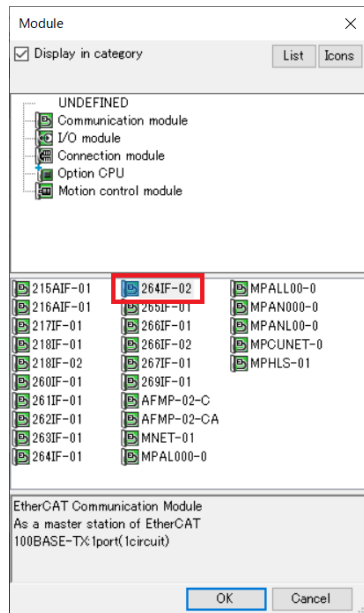
○Controller

Controller	Supported Firmware Version
YRM-X	Not available.
YRM-7	Not available.
MP3000 Series	1.56
Σ-7 Series	1.16
MP2000 Series	Not available.



## No. 2 Added support for 264IF-02 module.

Added support for 264IF-02 (EtherCAT Master module).



[Supported Versions]

oController

Controller	Supported Firmware Version
YRM-X	Not available.
YRM-7	Not available.
MP3000 Series	1.56
Σ-7 Series	1.16
MP2000 Series	Not available.

### No. 3 Improved the EDS file reading.

Some EDS files could not be read on the detailed definition screen of 263IF-01, so this has been improved.

[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	-
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. 4 Improved the Axis Setup Wizard.

When "Reflection of Tuning Result" of the axis setup wizard was executed in the project link connection, the values of the setting parameters were not reflected in the project file, so this has been improved.

[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	-
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. 5 Improved not to down after cross reference.

When cross-referencing by online to a ladder compiled with MPE720 Ver.7.63, MPE720 Ver.7 went down in some programs, so this has been improved.

[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.

## No. 6 Improved to check .NET Framework 4.6.2 when installing MPE720 Ver.7.

MPE720 Ver.7 currently requires ".NET Framework 4.6.2" to be installed as an operating requirement, so it has been improved to check this when installing MPE720 Ver.7.

[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.

## No. 7 Improved the Engineering builder.

The Engineering builder and Print builder could not be started in specific project files, so this has been improved.

[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.

## No. 8 Improved to open Engineering builder or other screens after INIT start.

After starting with INIT switch in the online state, the Engineering builder or other screens like the detailed definition screen of MC-Configurator could not be opened, so this has been improved.

[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.

## No. 9 Improved the ladder compiler.

There was a problem with the improvement of the ladder compiler implemented in MPE720 Ver.7.62 (improvement with comparison instruction in branch), so this has been improved. (Refer to "About compile a comparison instruction in branch" on page 6)

[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.