

Upgrade Information of MPE720 Version 7.44

1. Added and Improved Functions

1.1 Version 7.44 Upgrade Information

Items added and features improved from MPE720 version 7.43 to version 7.44 are as follows.

No.	Feature	Classification
1	The number of monitor data could be established in real time trace and XY trace.	Improvement
2	Supported the function that indicate and choose the unallocated axis in the library function.	Improvement
3	Improved the watch function.	Improvement
4	The operation which adds a register from a program editor screen to the trace was improved.	Improvement
5	It became possible to export a property information of program.	Improvement
6	Indication of status of transfer function was improved.	Improvement
7	Improved the processing of real time trace when the scan time is unmatch.	Improvement
8	Improved the Initiation method of detail definition in a module configuration definition.	Improvement
9	Improved the input of a search variable of a project search.	Improvement
10	Improved the internal process of a motion program.	Improvement
11	Improved the contents of the error message when logging starts.	Improvement
12	Improved the indication of printing the ladder editor.	Improvement
13	Improved the compilation processing in an Expression instruction.	Improvement
14	Improved the compilation processing in a motion program.	Improvement
15	Improved the display processing in a CP ladder.	Improvement
16	Improved the indication of reserved words of an Expression instruction.	Improvement
17	Improved the processing of operand input of a ladder editor.	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)

【DVD Media Version】

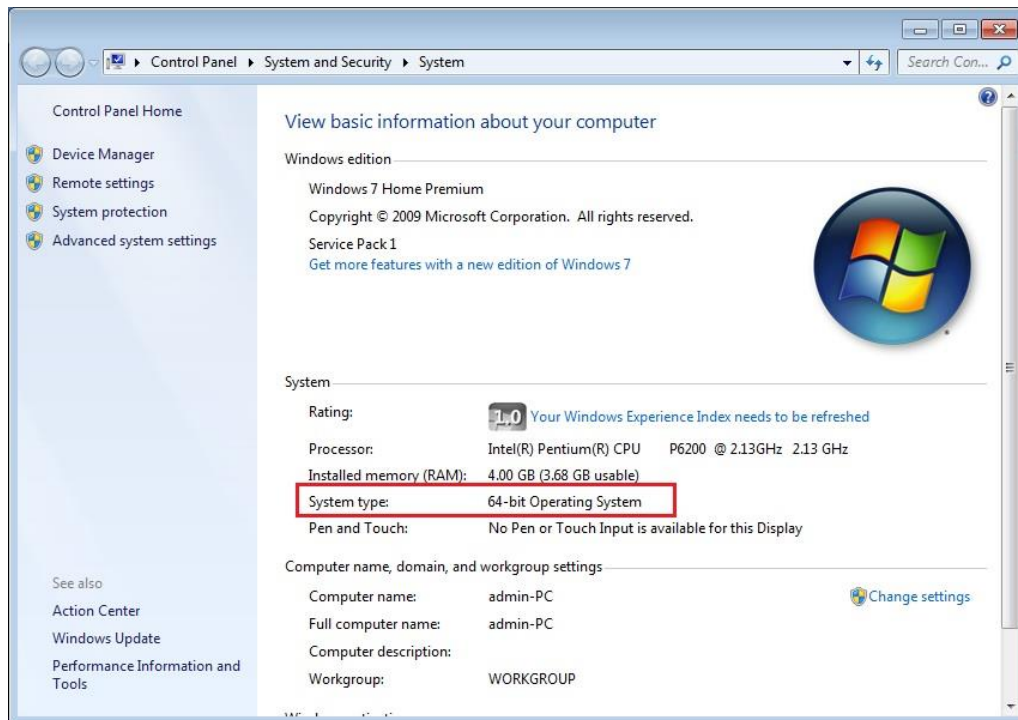
D(*5)\Tools\CleanUp\MPE720Ver7_x86.bat (32bitOS)

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

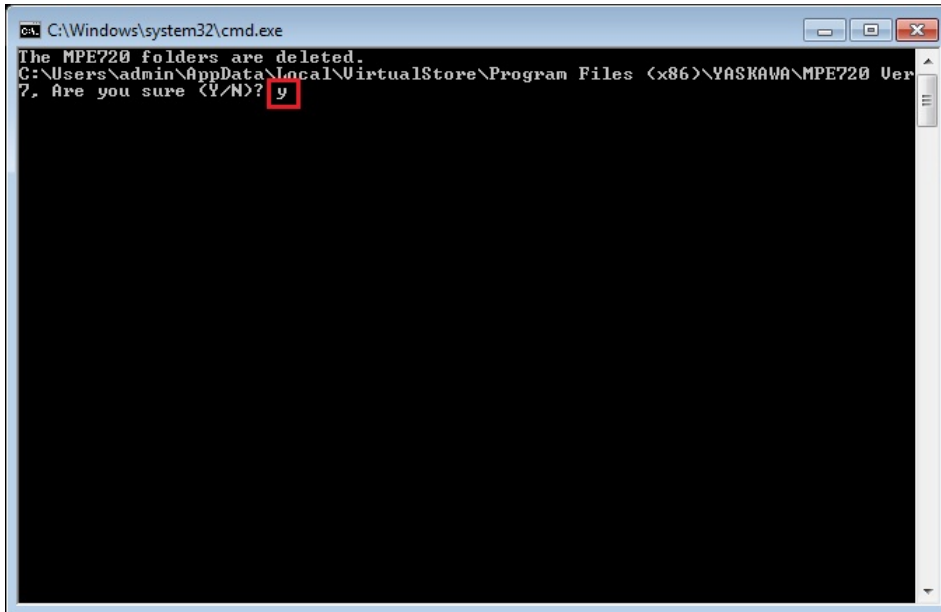
2. The copied batch file is performed.

MPE720Ver7_x86.bat (32bitOS)

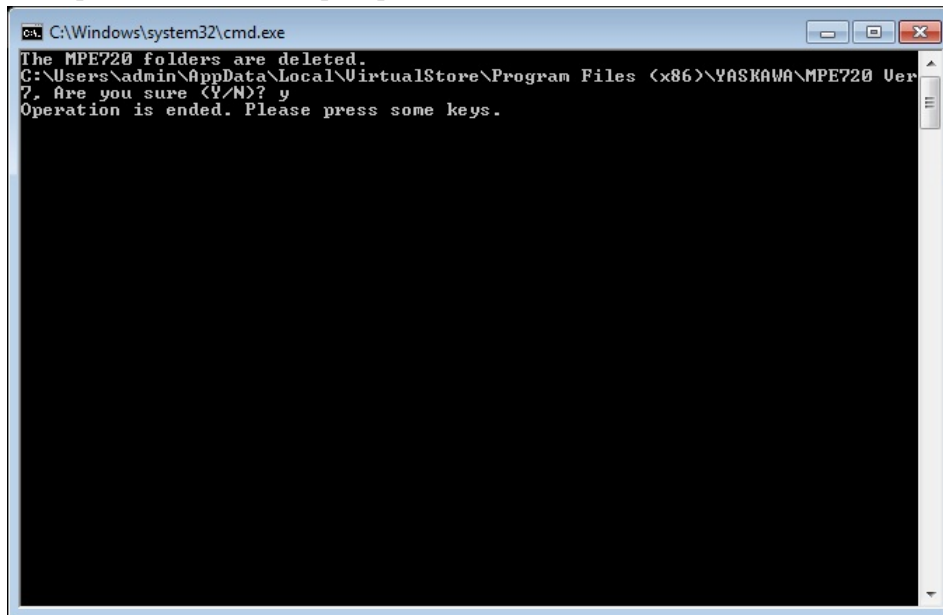
MPE720Ver7_x64.bat (64bitOS)



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】

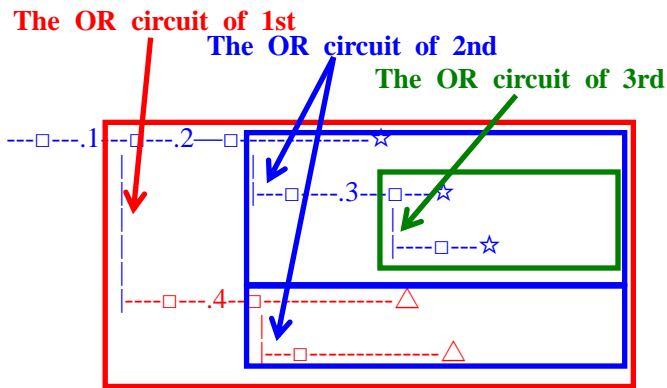
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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.

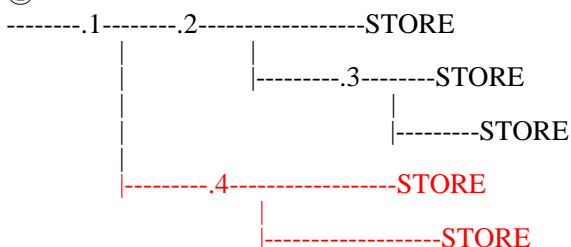
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
[NO Contact
STORE	STORE instruction
()	Coil

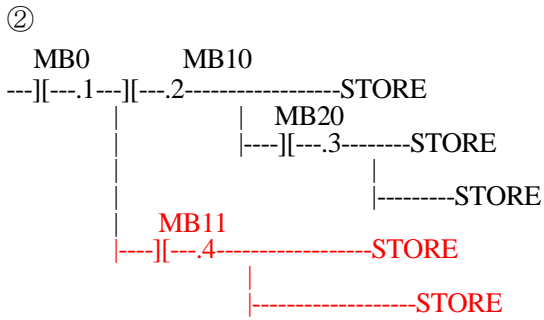
<NG Pattern>

①



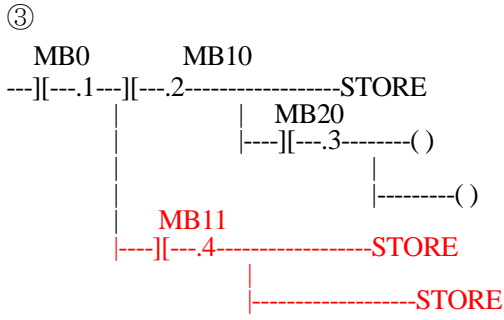
This pattern is minimum circuit pattern.

This is NG.



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

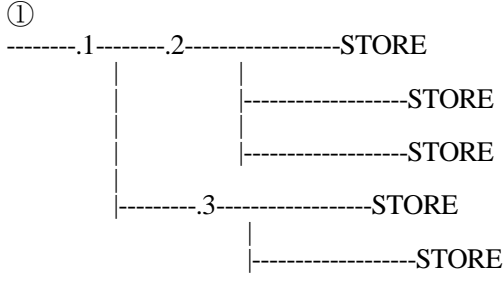
This is NG



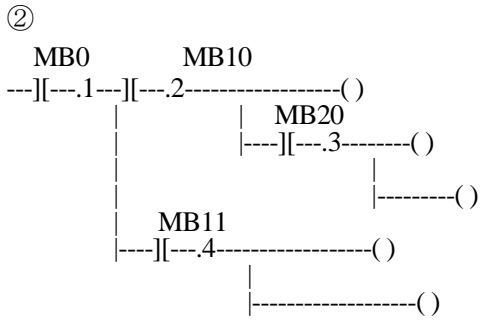
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

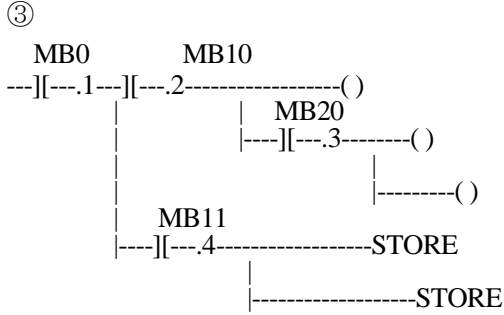
<OK Pattern>



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

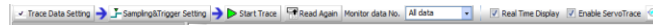
2. Description

No. 1 The number of monitor data could be established in real time trace and XY trace.

The number of trace data collected at the operation of rereading or a trace stop in real time trace and XY trace can be established.

We added the screen item on the tool bar of a screen for setting the trace data collected.

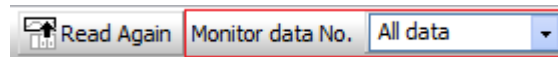
■Real time trace screen



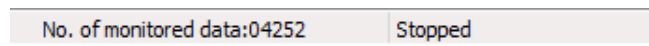
■XY trace screen



■List



A status bar was added, and the number of results of the collected trace data and trace execution status will be indicated.



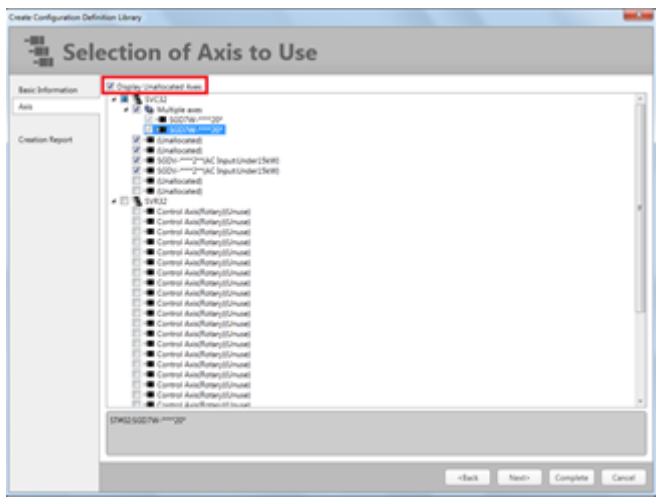
【Support Version】

○Controller

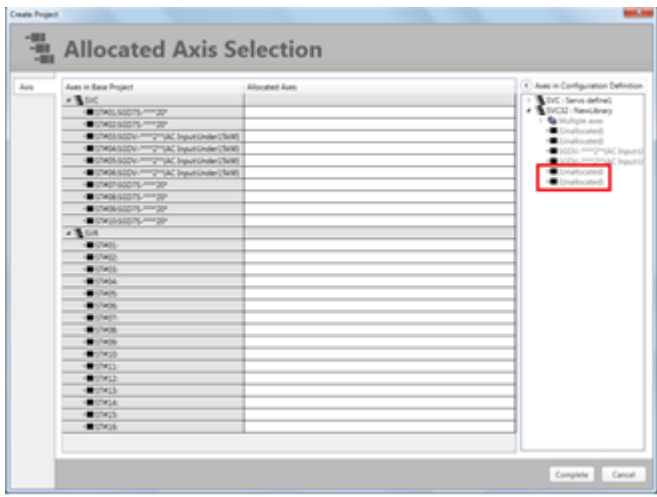
Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 2 Supported the function that indicate and choose the unallocated axis in the library function.

It became possible to choose display/nondisplay unallocated axis in a configuration definition package making Wizards :: axis page, and it became possible to choose an unallocated axis as a target axis.



It became possible to indicate and choose an unallocated axis in a making project Wizards:: axis page.



【Support Version】

○Controller

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MP3000 Series	It is not dependent on the version.
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No. 3 Improved the watch function.

(1) The setting of a watch can be imported/exported.

It's possible to choose the following item from a pop-up menu on the watch screen and use the export/import function.

‘Export’

‘Import’

※ It was the menu for export/import of register data in Ver.7.43, but it'll be change from MPE720 Ver7.44.

(2) The upper limit of the number of a registration variable/register of the watch was made 200.

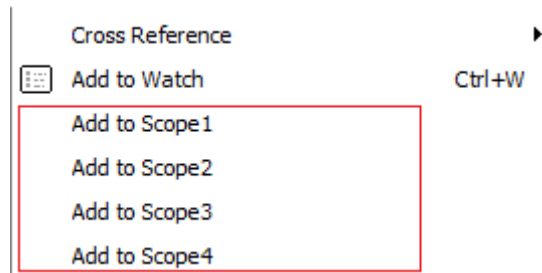
【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 4 The operation which adds a register from a program editor screen to the trace was improved.

The ladder program and the motion program prepared the menu to specify the trace number as the pop-up menu.



An addition destination will be real time trace only. It is possible that additional operation concludes without the choosing dialog of the trace number and the trace kind being indicated.

At the following choice state, the trace can be added to operate more than one register at once about a ladder program.

- * Operand: existence movement
- * Device: A register of all operands in the device is a target.
- * Rung: A register of all operands of the whole devices in Rung is a target.
- * More than one devices/Rung: A register of the operand in the area is a target.

At the following choice state, the trace can be added to operate more than one register at once about a motion program.

- * Area no selection: adds the all register which exists in the cursor line.
- * Area selection: adds the all register included in the character string.

【Support Version】

○Controller

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MP2000 Series	It is not dependent on the version.

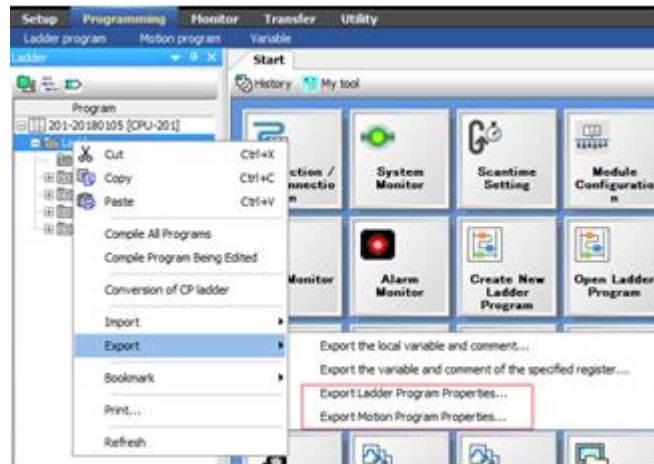
No. 5 It became possible to export a property information of program.

It became possible to export a property information of program.

It's possible to execute the export function from a pop-up menu of a ladder window or a motion window.

* Export of a property information of a ladder program.

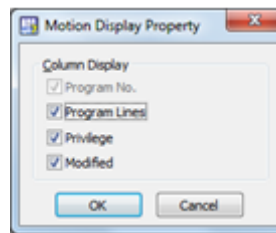
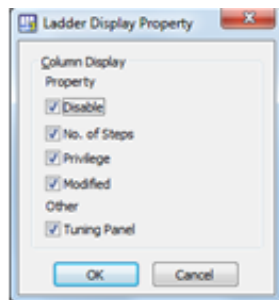
* Export of a property information of a motion program.



When the menu is chosen, it's possible to choose the property item to export and execute an export.

【Ladder】

【Motion】



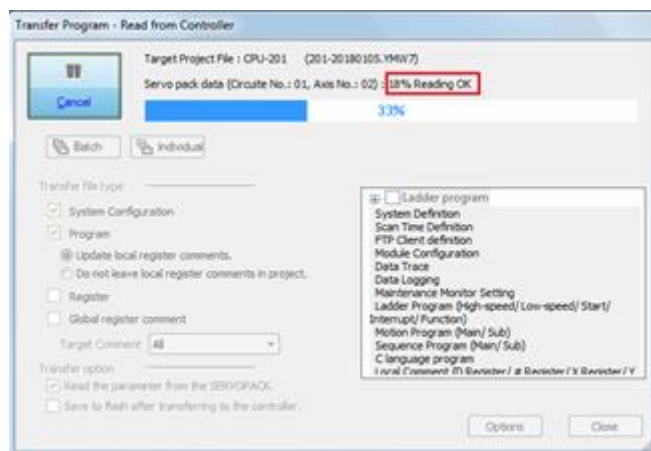
【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 6 Indication of status of transfer function was improved.

The transfer processing became to be executed every one axis, and the percentage of transferred parameter of each axis is indicated.



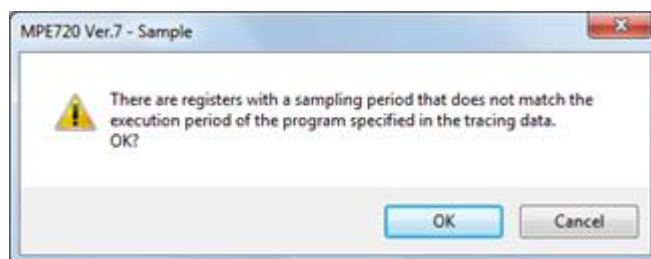
【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 7 Improved the processing of real time trace when the scan time is unmatched.

When the scan time of the D register of a trace target discorded with the sampling time of 'sampling and the trigger' setting in real time trace, it became possible to begin the trace by displaying a warning message.



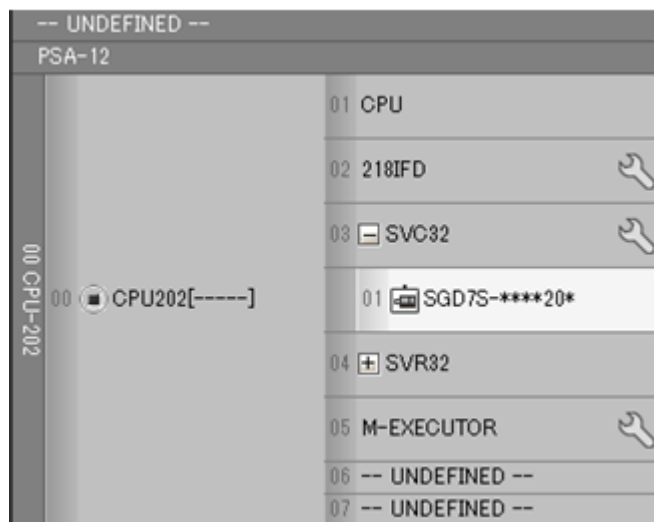
【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 8 Improved the Initiation method of detail definition in a module configuration definition.

Detail definition can be started by clicking a detail definition icon as well as a conventional way.



【Support Version】

○Controller

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MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 9 Improved the input of a search variable of a project search.

There was a phenomenon which can't input a long character string in an input item of a search variable of a project search. So, we improved a long character string can be input in an input item of a search variable of a project search.

【Support Version】

○Controller

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MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 10 Improved the internal process of a motion program.

When the subprogram designated at MSEE or SSEE in a motion program was eliminated and didn't exist, it was not possible to transfer the program and create the relevant number program. So, we improved to be able to transfer the program and create related number programs.

【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 11 Improved the contents of the error message when logging starts.

When logging started at the following condition, an indicated error message couldn't present the information which leads to its error cause.

【Conditions】

A local register of the program which doesn't exist is included in logging setting.



When logging started at the previously described conditions, it was improved that an indicated error message could present the information which leads to its error cause.



No. 13 Improved the compilation processing in an Expression instruction.

(1)When describing only "true" and "false" as a conditional expression of if sentence of an Expression instruction, the compilation was successful.

(2)When describing an array instruction to a subscript register in an Expression instruction, compilation was successful.

We improved (1), (2) above as follows.

(1)When describing only "true" and "false" as a conditional expression of if sentence of an Expression instruction, it was improved that the compilation won't succeed.

(2)When describing an array instruction to a subscript register in an Expression instruction, it was improved that the compilation won't succeed.

【Support Version】

○Controller

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MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 14 Improved the compilation processing in a motion program.

When describing both of an INC instruction and an ABS instruction in the same line of a motion program, compilation was successful. So, when describing both of an INC instruction and an ABS instruction in the same line of a motion program, we improved that compilation won't succeed.

【Support Version】

○Controller

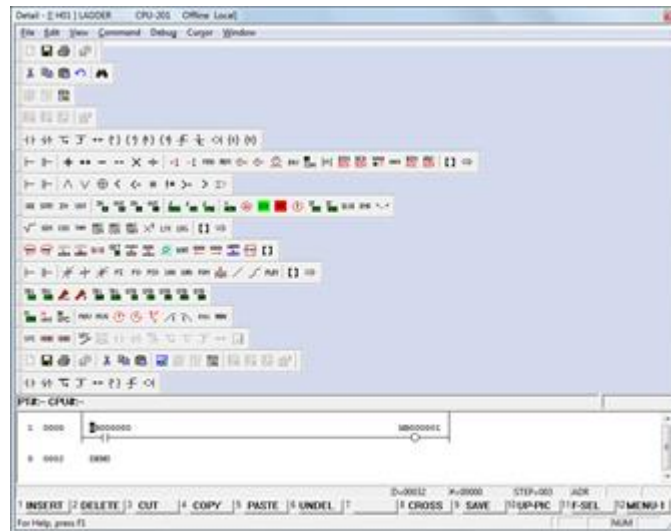
Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 15 Improved the display processing in a CP ladder.

When the following procedure was executed, there was a phenomenon by which a CP ladder program is shown to the corner of the detail definition screen of MC-Configurator.

[Procedure]

1. A project file of MP3000 series is created.
2. Create 2 CP ladder program with any instruction, and save them.
3. MC-Configurator is started in the state which open the 1st program.
4. A detail definition of 218IFD is opened.
5. The 2nd program is opened in the state which open the detail definition.



We improved so that a CP ladder program might be also shown to engineering manager in the previously described procedure.

【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 16 Improved the display of reserved words of an Expression instruction.

The following reserved words were added in a Expression instruction.

- To
- Step
- Word
- Long
- Quad
- Float
- Double
- Ftype
- Dtype

【Support Version】

○Controller

Controller	Support Firmware Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 17 Improved the processing of operand input of a ladder editor.

When being the cajolery processing of operand input of Double type in a ladder editor and being expressed by the value outside the reach of Double type, compilation was successful. So, when being the rounding processing of operand input of Double type in a ladder editor and being expressed by the value outside the reach of Double type, it was improved that compilation won't succeed.

【Support Version】

○Controller

Controller	Support Version
MP3000 Series	It is not dependent on the version.
Σ-7 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.