

Upgrade Information of MPE720 Version 7.29

1. Added and Improved Functions

1.1 Version 7.29 Upgrade Information

Items added and features improved from MPE720 version 7.28 to version 7.29 are as follows.

No.	Feature	Classification
1	The operation method of a constant variable has been improved.	Functional enhancement
2	The "Change Allocation of SERVOPACK" was supported in MC-Configurator.	Functional enhancement
3	The display of the drawing of the edit state was improved.	Functional enhancement
4	The button display mode was added to the display mode of the preset value of the Watch function.	Functional enhancement
5	The display digit display mode of the current value was improved.	Functional enhancement
6	The Edit Parameter screen of the Ladder editor has been improved.	Functional enhancement
7	The function of "the Replace in Project" was strengthened.	Functional enhancement
8	The operation of "Write the parameter into the SERVOPACK" transfer option of the Transfer function has been improved.	Functional enhancement
9	The "Write into Controller" of the Transfer function has been improved.	Improvement
10	The operation of the history maintenance function of the Cross Reference has been improved.	Improvement
11	The operation of the Cross Reference function has been improved.	Improvement
12	The refresh of the display of Ladder Instruction window has been improved.	Improvement
13	The operation of the Axis Monitor has been improved.	Improvement
14	The order of the register number display of the Comment List has been improved.	Improvement
15	The operation at the time of the online connection to the PCI board type controller has been improved.	Improvement
16	The operation when the Ver.6 compatible project file (YMW file) is opened has been improved.	Improvement
17	The compile operation of the Motion program has been improved.	Improvement
18	The print function of the Ladder Program has been improved.	Improvement
19	The operation of "the Search in Project" has been improved.	Improvement
20	The drag and drop operation in the Module Configuration screen 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)

【DVD Media Version】

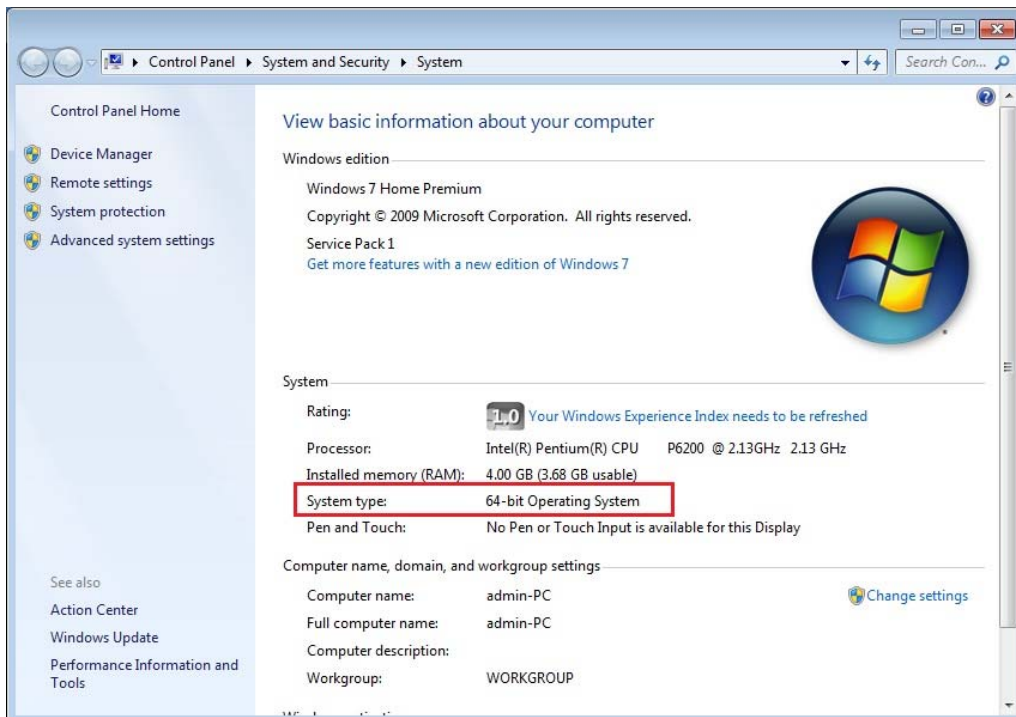
D(*5):\Tools\CleanUp\MPE720Ver7_x86.bat (32bitOS)

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

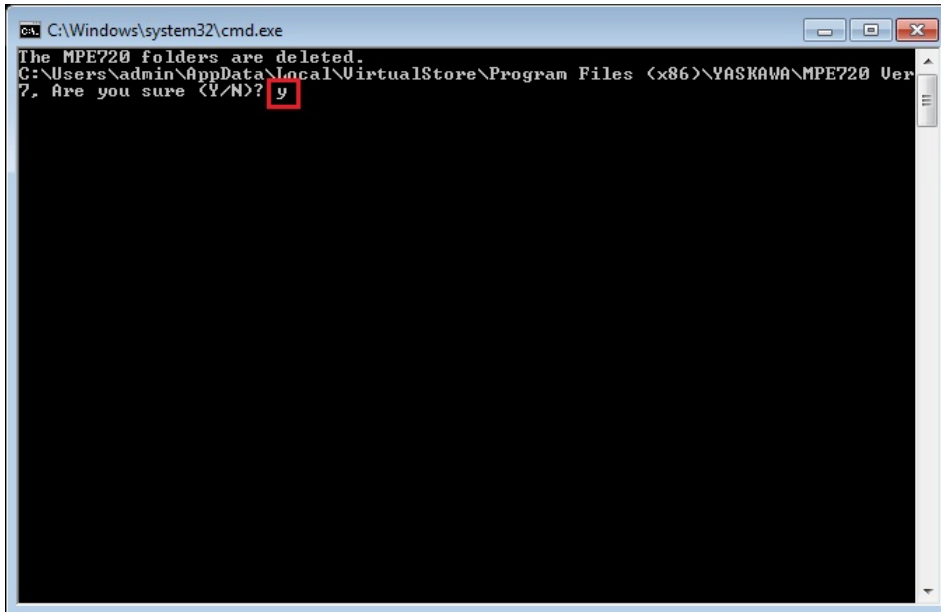
2. The copied batch file is performed.

MPE720Ver7_x86.bat (32bitOS)

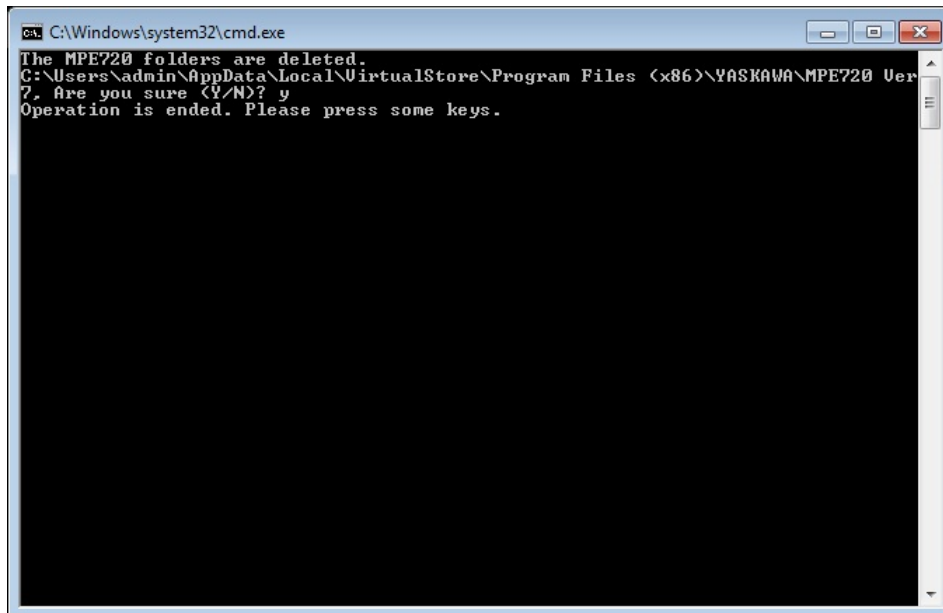
MPE720Ver7_x64.bat (64bitOS)



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】

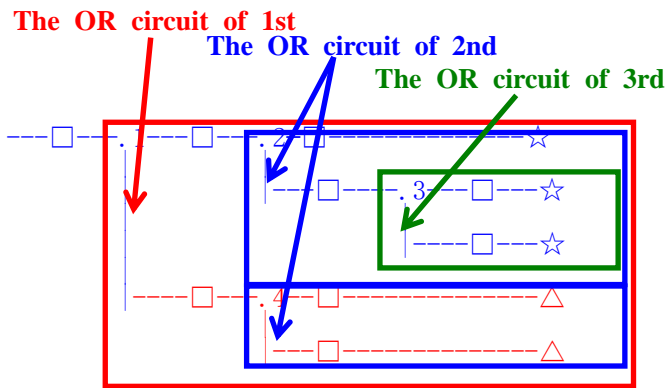
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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.

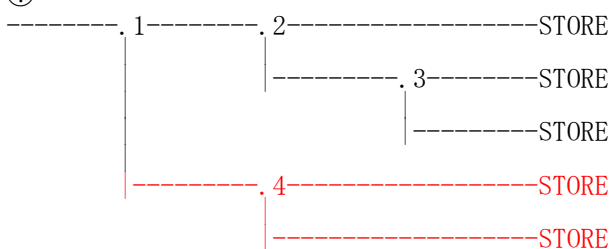
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
	NO Contact
STORE	STORE instruction
()	Coil

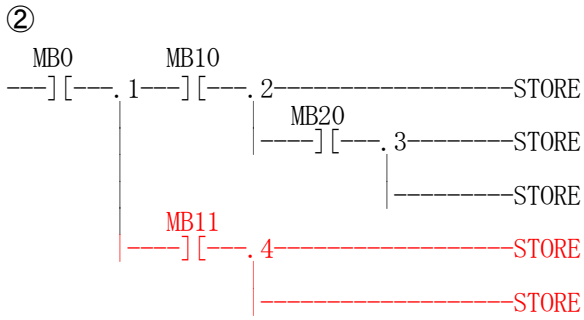
<NG Pattern>

①



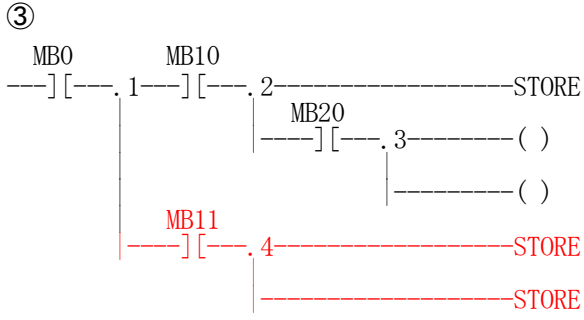
This pattern is minimum circuit pattern.

This is NG.



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

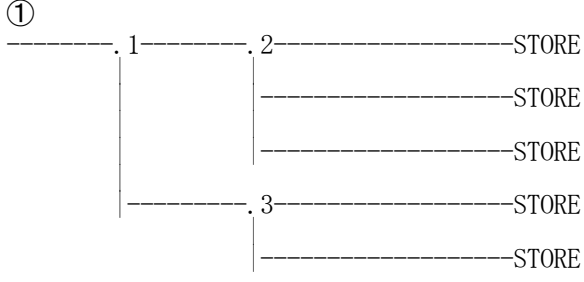
This is NG



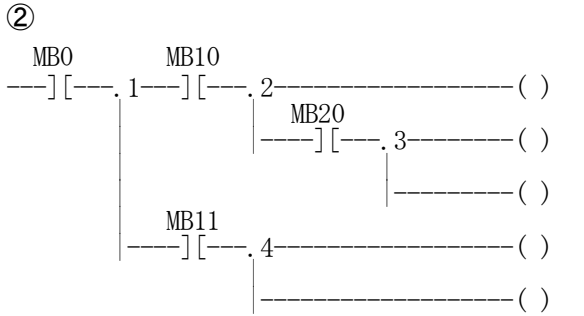
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

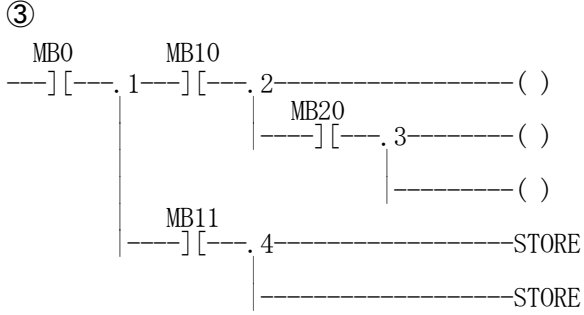
<OK Pattern>



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

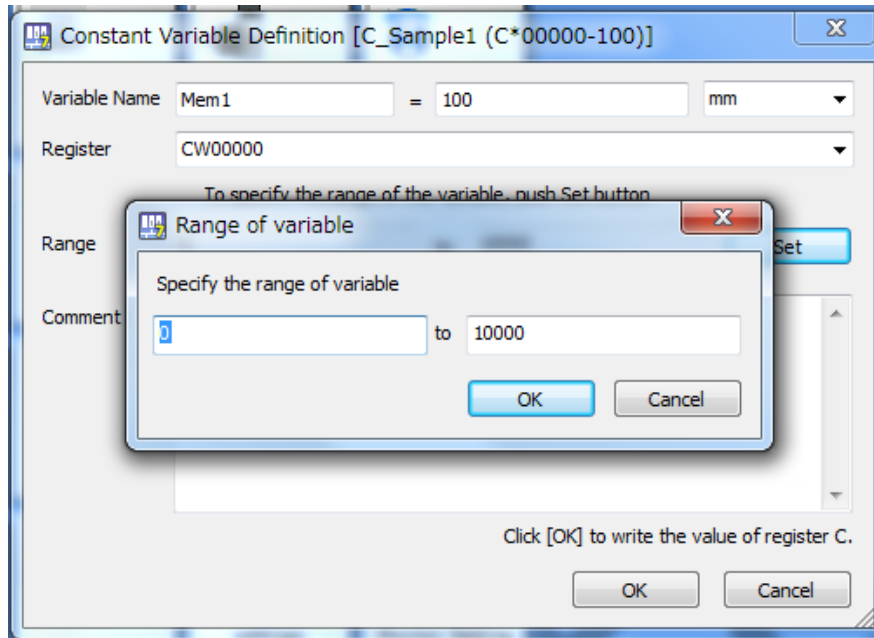
No.	Upgrade Information	Remarks
1	MPE720 version 7.11 upgrade information	version 7.10→version 7.11
2	MPE720 version 7.13 upgrade information	version 7.11→version 7.13
3	MPE720 version 7.14 upgrade information	version 7.13→version 7.14
4	MPE720 version 7.20 upgrade information	version 7.14→version 7.20
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

2. Description

No. 1 The operation method of a constant variable has been improved.

The following improvements were carried out about the constant variable.

1. In the constant variable definition screen, it has improved so that the range of variable can be set up.



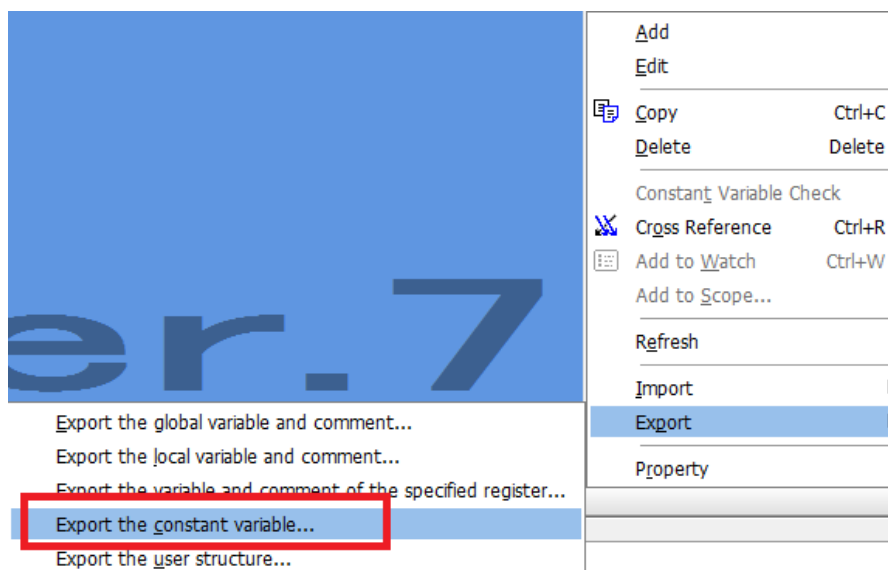
2. In export or import function of the constant variable, export or import in the csv file format were supported.

【The export method】

- ① Choose the "Export" -> "Export the constant variable" the right click menu of a variable window.

【The import method】

- ① Choose the "Import" -> "Import the constant variable" the right click menu of a variable window.

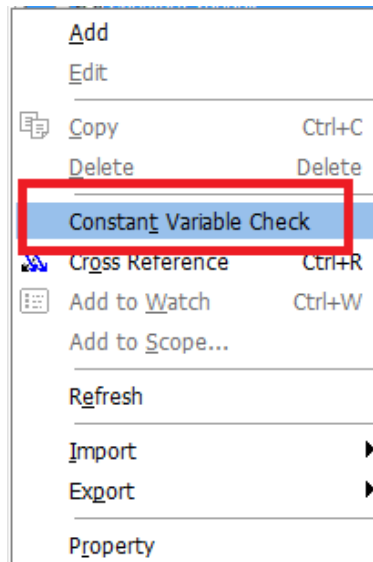


3. The function which carries out the relation check of the preset value registered into the constant variable and the current value of C register was supported.

It compares, and when the preset value and the current value are inharmonious, the preset value registered in the constant variable is reflected in the current value of C register.

【The operation method】

- ① Choose the "Constant Variable" of a variable window.
- ② Choose the "Constant Variable Check" of the right click menu.



【Support Version】

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

No. 2 The "Change Allocation of SERVOPACK" was supported in MC-Configurator.

The function to change a model was supported about the SERVOPACK assigned to the motion control module (SVB or SVC).

In this function, the motion parameter (fixed Parameter and Setting Parameter) is succeeded.

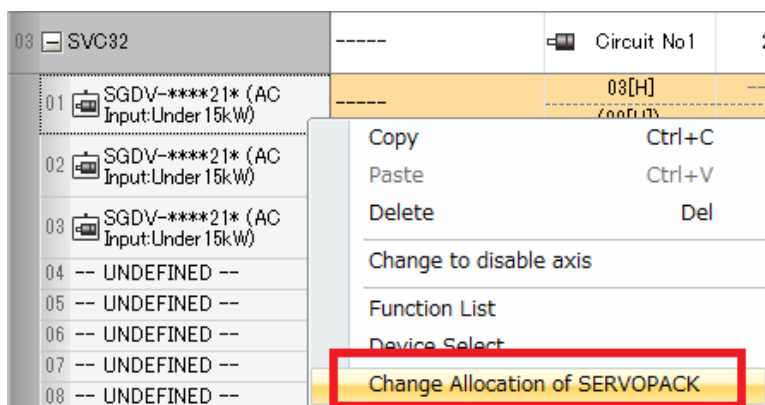
* Exclude the Servo Parameter.

【Operating condition】

- ① Offline
- ② The state saved. (It is not in an edit state.)

【Operating procedure】

- ① Choose the SERVOPACK assigned to SVB or SVC in the Module Configuration screen of MC-Configurator.
- ② Choose "Change Allocation of SERVOPACK" of the right click menu.



【Conversion support model】

OMECHATROLINK-II Communications References SERVOPACK

Before		After
SGDV-****11*(AC Input:Over22kW)	→	Wild Card Servo Wild Card Servo(Linear)
SGDV-****11*(AC Input:Under15kW)	→	Wild Card Servo Wild Card Servo(Linear)
SGDV-****15*(AC Input:Under15kW)	→	Wild Card Servo Wild Card Servo(Linear)
SGDV-***E11*(DC Input)	→	Wild Card Servo Wild Card Servo(Linear)
Wild Card Servo	→	SGDV-****11*(AC Input:Over22kW) SGDV-****11*(AC Input:Under15kW) SGDV-****15*(AC Input:Under15kW) SGDV-***E11*(DC Input)
Wild Card Servo(Linear)	→	SGDV-****11*(AC Input:Over22kW) SGDV-****11*(AC Input:Under15kW) SGDV-****15*(AC Input:Under15kW) SGDV-***E11*(DC Input)

OMECHATROLINK-III Communications References SERVOPACK

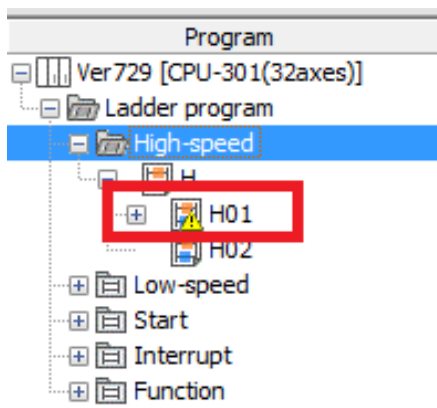
Before		After
SGD7S-****20*	→	Wild Card Servo Wild Card Servo(Linear)
SGD7W-****20*	→	Wild Card Servo Wild Card Servo(Linear)
SGDV-****21*(AC Input:Over22kW)	→	SGD7S-****20* SGD7W-****20* Wild Card Servo Wild Card Servo(Linear)
SGDV-****21*(AC Input:Under15kW)	→	SGD7S-****20* SGD7W-****20* Wild Card Servo Wild Card Servo(Linear)
SGDV-****25*(AC Input:Under15kW)	→	SGD7S-****20* SGD7W-****20* Wild Card Servo Wild Card Servo(Linear)
SGDV-***E21*(DC Input)	→	SGD7S-****20* SGD7W-****20* Wild Card Servo Wild Card Servo(Linear)
SGDV-MDA02**M3*	→	SGD7S-****20* SGD7W-****20* Wild Card Servo Wild Card Servo(Linear)
Wild Card Servo	→	SGD7S-****20* SGD7W-****20* SGDV-****21*(AC Input:Over22kW) SGDV-****21*(AC Input:Under15kW) SGDV-****25*(AC Input:Under15kW) SGDV-***E21*(DC Input) SGDV-MDA02**M3*
Wild Card Servo(Linear)	→	SGD7S-****20* SGD7W-****20* SGDV-****21*(AC Input:Over22kW) SGDV-****21*(AC Input:Under15kW) SGDV-****25*(AC Input:Under15kW) SGDV-***E21*(DC Input) SGDV-MDA02**M3*

【Support Version】

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

No. 3 The display of the drawing of the edit state was improved.

Between the drawing saved in compiled and the drawing saved in the state of edit, it has improved so that it may display by a different icon.



【Support Version】

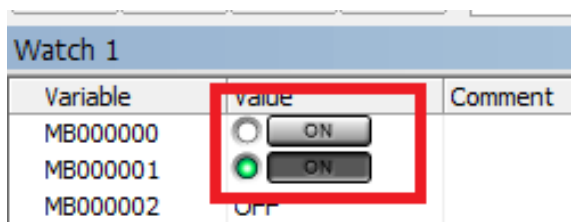
Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 4 The button display mode was added to the display mode of the preset value of the Watch function.

In the Watch function, the button display mode was added to the display mode of the bit type register.

【Operating procedure】

- ① Choose the bit type register registered into the Watch function.
- ② Choose "BUTTON" of the right click menu.



【Support Version】

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

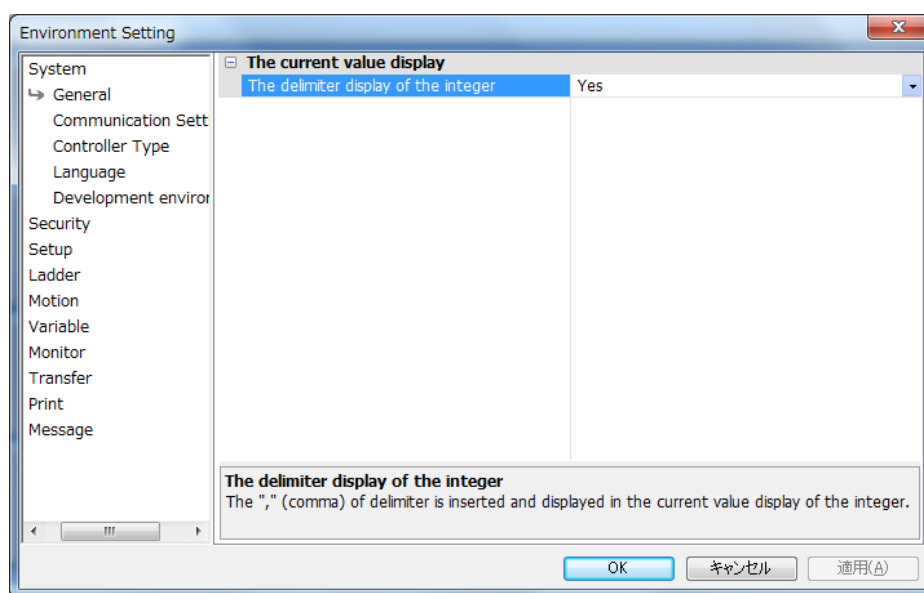
No. 5 The display digit display mode of the current value was improved.

In the Ladder editor or the register list or the watch function, etc., the display mode of the “,” (comma) of delimiter is inserted and displayed in the current value display of the integer was supported.

Watch 1		
Variable	Value	Comment
ML00000	1,234,567,890	
ML00002	1,000,000	

【Operating procedure】

- ① Choose “Environment Setting” of the file menu.
- ② Choose “General” of “System” folder.
- ③ Choose “Yes” of “The delimiter display of the integer” of “The current value display”.

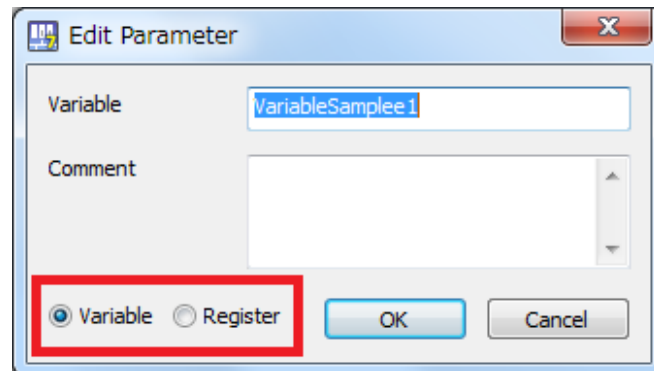


【Support Version】

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

No. 6 The Edit Parameter screen of the Ladder editor has been improved.

In the Edit Parameter screen of the Ladder editor, the radio button which changes the display mode of the register and the variable were added.



【Support Version】

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

No. 7 The function of “the Replace in Project” was strengthened.

In the function of “the Replace in Project”, the CP Ladder was also supported as a candidate for substitution to the optional feature “which moves a search register comment to a substitution register.”

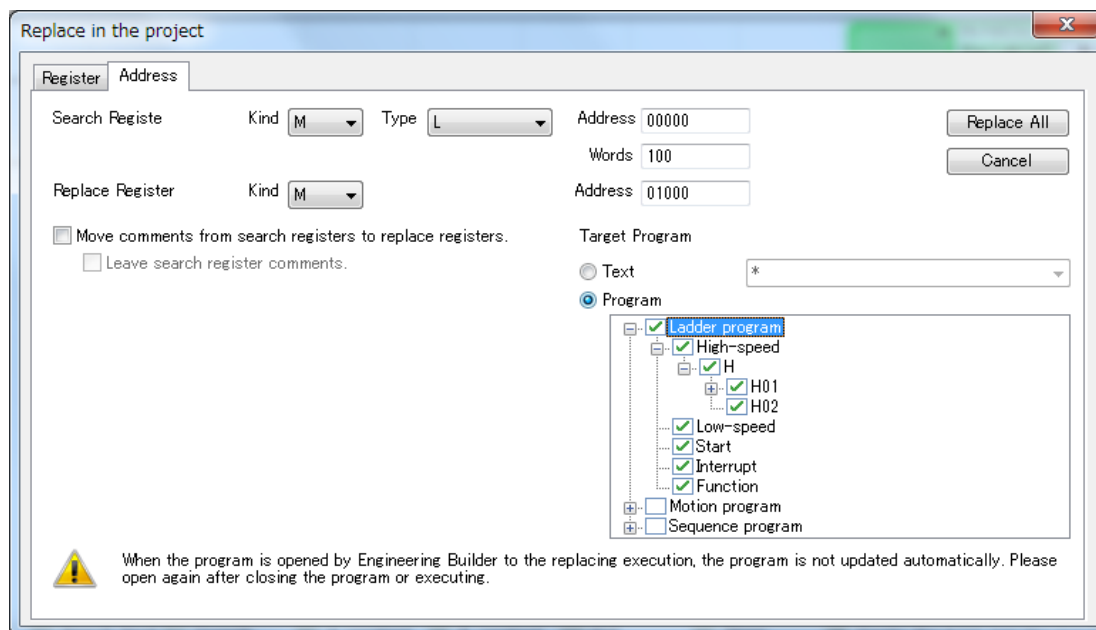
The optional features “which move a search register comment to a substitution register” are a symbol of the register currently used by CP ladder, and a function which can move a comment to the register of a substitution place.

Ex) When ML0000, ML0002 and ML0004 are replaced by ML1000, ML1002 and ML1004

Register	Symbol	Comment
ML0000	X instruction position	X instruction position for conveyance
ML0002	Y instruction position	Y instruction position for conveyance
ML0004	Z instruction position	Z instruction position for conveyance
ML1000	–	–
ML1002	–	–
ML1004	–	–

↓ Replace

Register	Symbol	Comment
ML0000	–	–
ML0002	–	–
ML0004	–	–
ML1000	X instruction position	X instruction position for conveyance
ML1002	Y instruction position	Y instruction position for conveyance
ML1004	Z instruction position	Z instruction position for conveyance



【Support Version】

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

No. 8 The operation of “Write the parameter into the SERVOPACK” transfer option of the Transfer function has been improved.

In the Transfer function, when servo alarm was generated (when the servo ready signal turned off), the condition judging which does not transmit servo parameter to the SERVOPACK was put in.

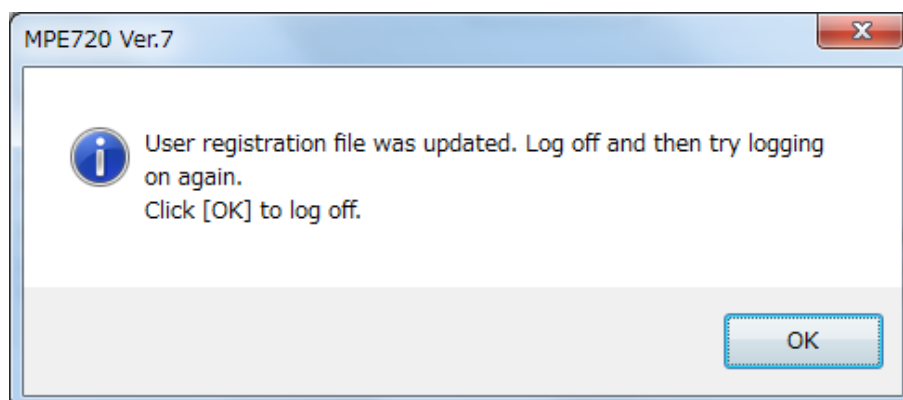
Since this was an unnecessary check, it was corrected so that the condition judging might be reconsidered and servo parameter might be transmitted also when servo alarm was generated.

【Support Version】

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

No. 9 The “Write into Controller” of the Transfer function has been improved.

In the “Write into Controller” of the Transfer function, since there was a phenomenon that the message of “User registration file was updated.” was displayed, MPE720 once closed and reopen again when the specific project file was transmitted. So, this has been improved.

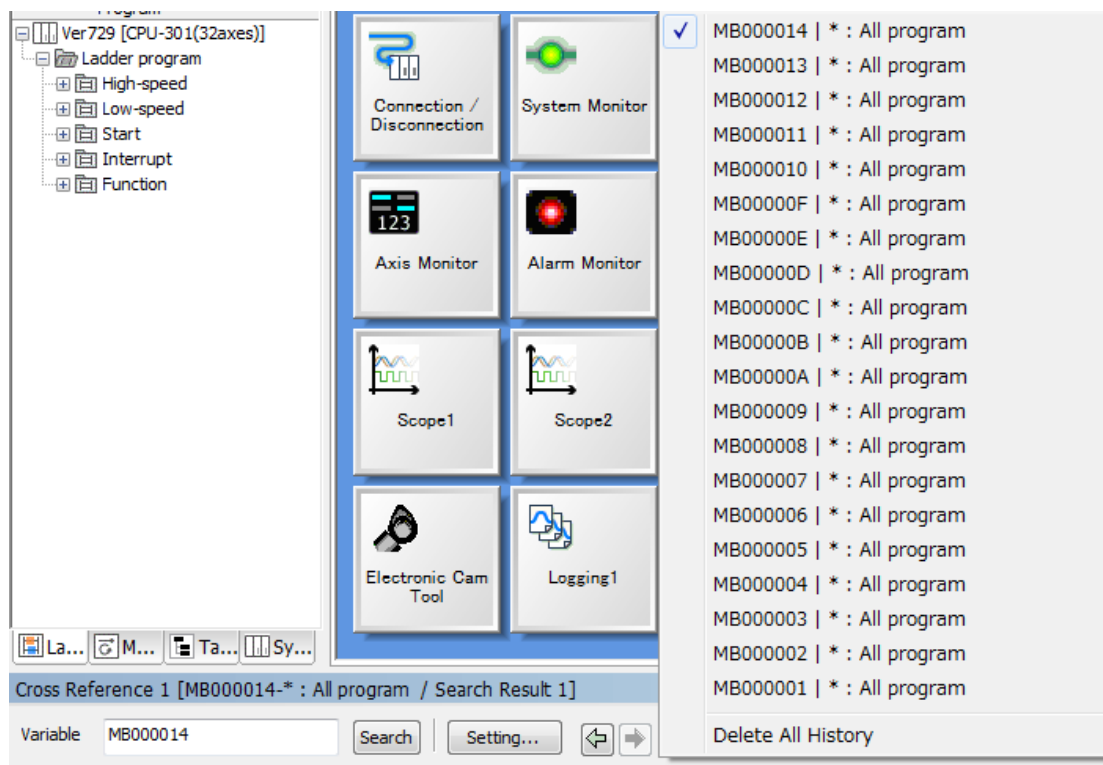


【Support Version】

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

No. 10 The operation of the history maintenance function of the Cross Reference has been improved.

In the history maintenance function of the Cross Reference, when a project file was opened or a project file was saved in the state where many history information is held, there was a phenomenon of taking time. So, this has been improved. The number of history maintenance of the Cross Reference is kept to 20 affairs.



【Support Version】

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

No. 11 The operation of the Cross Reference function has been improved.

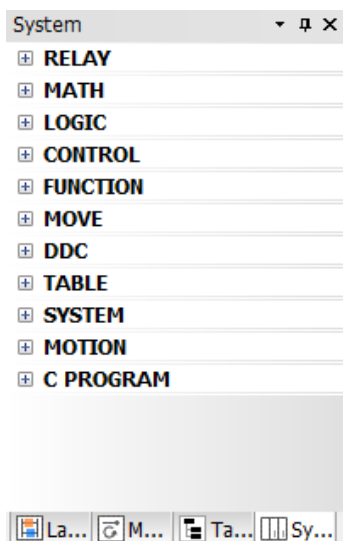
In the Motion Program, since there was a phenomenon that the register used for the TIM command could not search by the Cross Reference function. So, this has been improved.

【Support Version】

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

No. 12 The refresh of the display of Ladder Instruction window has been improved.

Since there was a phenomenon in which the Ladder Instruction window was displayed on the screen of MPE720 when the Ladder Instruction window was closed and it carried out "Refresh". So, 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. 13 The operation of the Axis Monitor has been improved.

Since there was a phenomenon in which MPE720 froze at the time of using the Axis Monitor when the axes of 32 axes or more was set to the Group Definition. So, 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. 14 The order of the register number display of the Comment List has been improved.

In a specific project file, since there was a phenomenon in which the order of the register number displayed was not displayed in order of an ascending order when the Comment List was started. So, 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. 15 The operation at the time of the online connection to the PCI board type controller has been improved.

Since there was a phenomenon in which the partial functions such as the Trace function did not operate normally in the environment where the CPU number of the PCI board type controller (Ex MP2100) was set up in except 1. So, this has been improved.

【Applicable model】

- MP2100
- MP2500
- MP2100M
- MP2500M
- MP2101
- MP2101M
- MP2101T
- MP2101TM

【Support Version】

Controller	Support Version
MP3000 Series	No applicable model
MP2000 Series	It is not dependent on the version.

No. 16 The operation when the Ver.6 compatible project file (YMW file) is opened has been improved.

Since there was a phenomenon in which the preservation confirmation message was displayed when the Ver.6 compatible project file (YMW file) was opened by MPE720 Ver7 and the project file was closed, without editing anything. So, 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. 17 The compile operation of the Motion program has been improved.

In the interpolation commands (MVS, MCC, MCW and SKP) of the Motion program, since it had not added normally when the configuration information of “-” which is a sign of the outside for the interpolation feeding speed was in the following conditions, this has been improved.

【Conditions】

When register (indirect) specification of the instruction position of the axis which specified the outside for an interpolation feeding speed is carried out

Ex) The C1 axis information set to the outside for the interpolation feeding speed is not right.

MVS[A1]ML1000 [B1]ML1002 [-C1]ML1004,

O Before Ver7.28

It operates as an axis for an interpolation feeding speed also C1 axis.

O Ver7.29 or later

C1 axis, it operates as an axis of the outside for an interpolation feeding speed.

【Support Version】

Controller	Support Version
MP3000 Series	Ver1.02 or later
MP2000 Series	Unsupported

No. 18 The print function of the Ladder Program has been improved.

1. In the print function of the Ladder Program, since the file name was not right when a grandchild drawing was printed to PDF. So, this has been improved.

Ex) When H01.01 is printed

The file name is saved as H01.pdf.

Since there was a phenomenon in which the printing size of the Ladder Program was printed in half size when the printing quality of the printer was set up more than 1200DPI (Dots Per Inch). So, 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. 19 The operation of “the Search in Project” has been improved.

1. In the “Search in Project”, when it was searched in the following condition, since there was a phenomenon in which what is not registers, such as IF command used in the Motion Program was searched. So, this has been improved.

【Conditions】

- ① In address search of “the Search in Project”, the conditions is set to “IO” as register type, “BWIQFDA” as data type, “00000” as address and “32767” as words and search in the Motion Program.
 - ② IF command (IF DW00000 == 1) is used in the Motion Program.
2. Since there was a phenomenon in which the search of CP Ladder could not be performed when address search of the “Search in Project” was performed. So, 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.20 The drag and drop operation in the Module Configuration screen has been improved.

In the Module Configuration of MC-Configurator, since it was moving to the station number which cannot be assigned by drag and drop operation about the SERVOPACK which was assigned to SVB or SVC. So, this has been improved.

Ex) In the case of example SVB-01

The SERVOPACK will be movable to the station number after 17 by drag and drop operation.

【Support Version】

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