

Upgrade Information of MPE720 Version 7.30

1. Added and Improved Functions

1.1 Version 7.30 Upgrade Information

Items added and features improved from MPE720 version 7.29 to version 7.30 are as follows.

No.	Feature	Classification
1	The model of the Sigma-7 series SERVOPACK was added.	Add function
2	The servo trace cooperation function was added to the Real-Time Trace function.	Add function
3	The "Controller installation environment" was added to the Maintenance Monitor function.	Functional enhancement
4	The group display mode of the variable was added.	Functional enhancement
5	The structure comment operational mode was added.	Functional enhancement
6	Multiple selection operation was added about the variable and the structure.	Functional enhancement
7	The parameter was added to Fixed Parameter and Setting Parameter of SVC-01 module.	Functional enhancement
8	The parameter was added to Fixed Parameter of SVB-01 module.	Functional enhancement
9	When Sigma-7 series SERVOPACK was used, the operation of the SigmaWin+ cooperation function has been improved.	Improvement
10	The error message of Trace function has been improved.	Improvement
11	The display refresh timing of Trace Manager has been improved.	Improvement
12	The BUTTON display mode of the Watch function has been improved.	Improvement
13	The cross reference operation of the register used in the Motion Program has been improved.	Improvement
14	The operation of the SigmaWin+ function at the time of SGD7W use has been improved.	Improvement
15	The Version Information function of MC-Configurator has been improved.	Improvement
16	The operation at the time of parameter edit of Sigma-5-MD has been improved.	Improvement
17	The display of the module allotment of MC-Configurator has been improved.	Improvement
18	The print function of the Ladder Program has been improved.	Improvement
19	The print function of RIOTOOL 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】

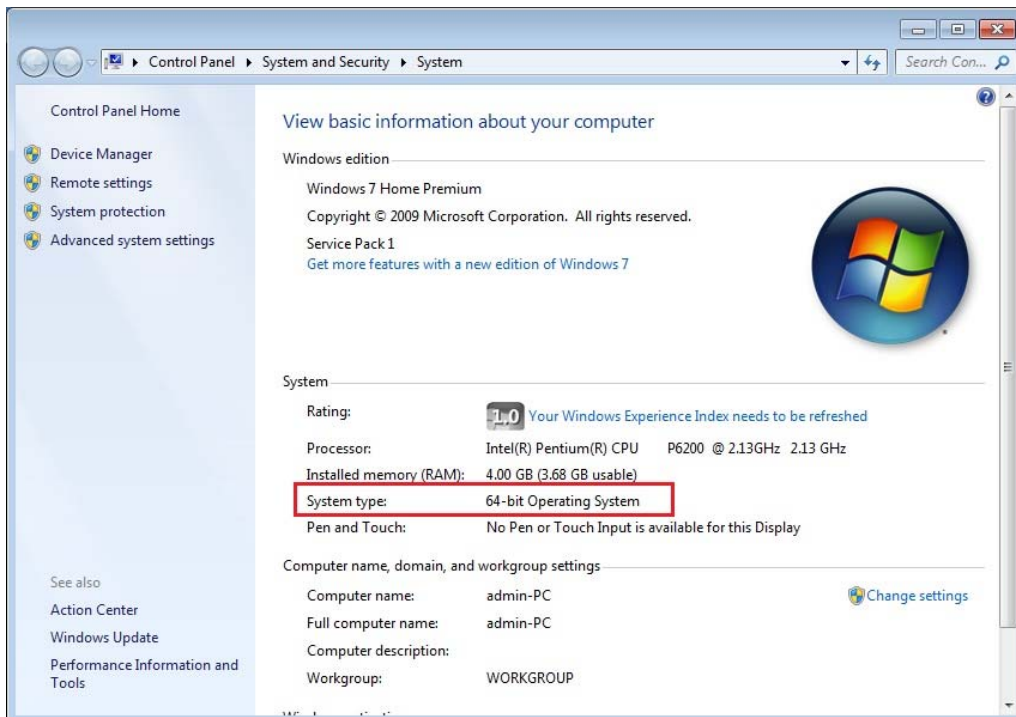
D(*5):\Tools\CleanUp\MPE720Ver7_x86.bat (32bitOS)

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

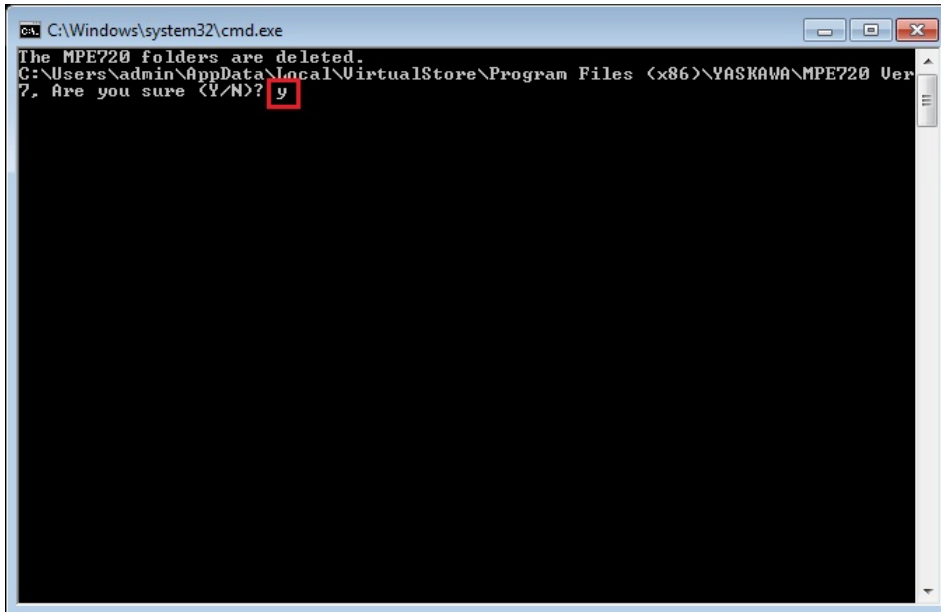
2. The copied batch file is performed.

MPE720Ver7_x86.bat (32bitOS)

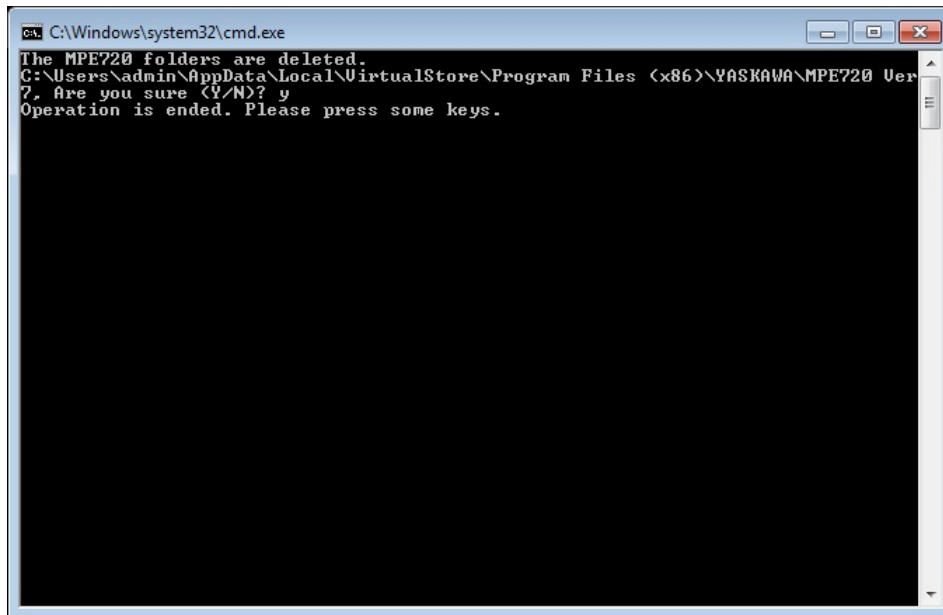
MPE720Ver7_x64.bat (64bitOS)



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】

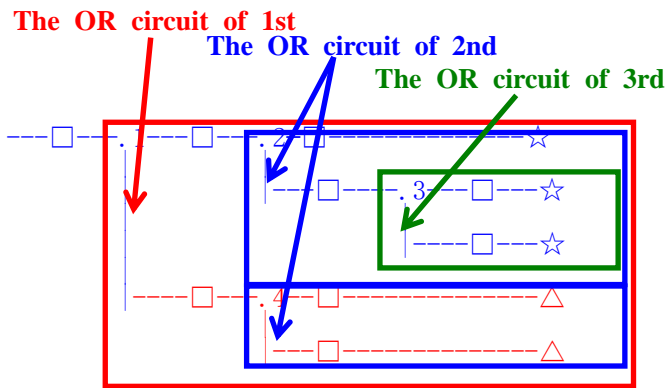
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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.

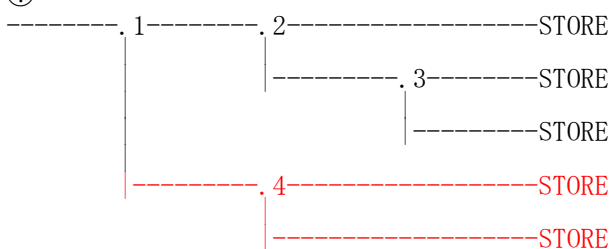
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
	NO Contact
STORE	STORE instruction
()	Coil

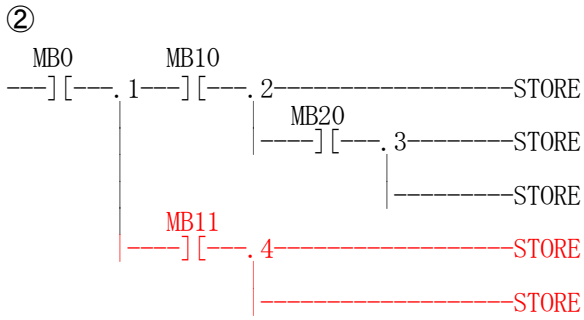
<NG Pattern>

①



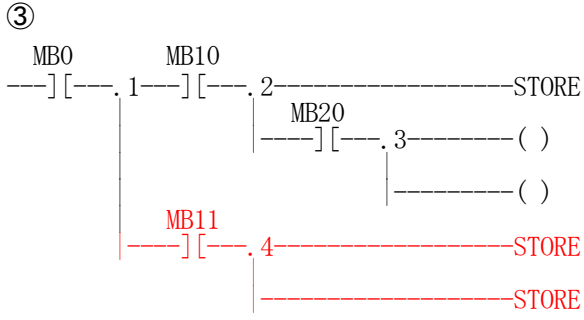
This pattern is minimum circuit pattern.

This is NG.



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

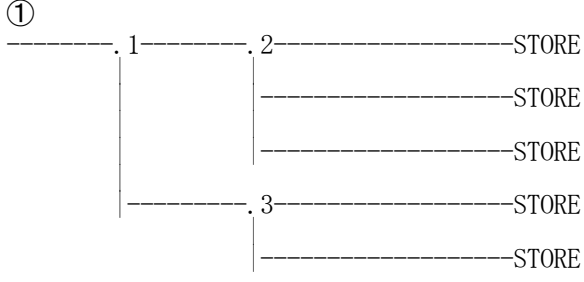
This is NG



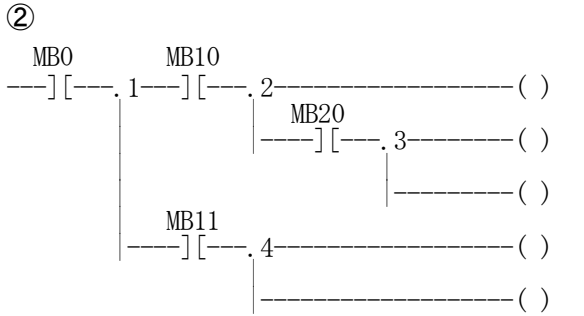
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

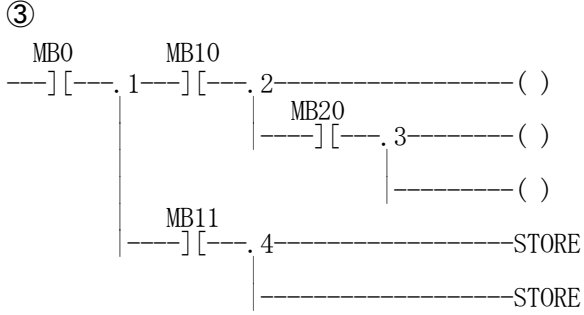
<OK Pattern>



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
11	MPE720 version 7.29 upgrade information	version 7.28→version 7.29

2. Description

No. 1 The model of the Sigma-7 series SERVOPACK was added.

It supported about the following SERVOPACK.

- ① MECHATROLINK-II Communications References Sigma-7S (SGD7S-****10*) SERVOPACK (Rotary type)
- ② MECHATROLINK-III Communications References Sigma-7S (SGD7S-****20*) SERVOPACK (Linear type)
- ③ MECHATROLINK-III Communications References Sigma-7W (SGD7W-****20*) SERVOPACK of 2-axis driving model (Linear type)

1. Module Configuration

In the Module Configuration, it changed so that the SERVOPACK could be assigned.

2. Fixed, Setting, Monitor Parameter

The screen for carrying out a detailed setup of Fixed Parameters, Setting Parameters and Monitor Parameters of the SERVOPACK were added.

3. Servo Parameter, Servo Monitor

The screen for carrying out a detailed setup of Servo Parameter and Servo Monitor of the SERVOPACK were added.

00 CPU-201	03	SVC32	----	☑ Circuit No1	2	
	01	SGD7S-****20*	----	03[H]	----	
				(00[H])	----	
	02	SGD7S-****20* (Linear)	----	04[H]	----	
				(00[H])	----	
		SGD7W-****20*	----	05[H]	----	
				----	----	
		03	Control Axis(Rotary)	----	(00[H])	----
				----	----	
		04	Control Axis(Linear)	----	(01[H])	----
01 MBU-B03	05	-- UNDEFINED --	----			
	06	-- UNDEFINED --	----			
	07	-- UNDEFINED --	----			
	08	-- UNDEFINED --	----			
		04	SVR32	----	☑ Circuit No3	2
	05	M-EXECUTOR	----	----	----	
	06	-- UNDEFINED --	----			
	01	SVB01	----	☑ Circuit No5	1	
		01	SGD7S-****10*	01	----	
		02	-- UNDEFINED --			
		03	-- UNDEFINED --			
		04	-- UNDEFINED --			

【Support Version】

- ① MECHATROLINK-II Communications References Sigma-7S (SGD7S-****10*) SERVOPACK (Rotary type)

* Linear type: It will support by the next version.

Controller

Controller		Support Version
MP2000 Series	Built-in SVB	Ver2.89 or later

Option Module

Module	Support Version
SVB-01	Ver1.33 or later

Engineering Tool

Tool	Support Version
MPE720	Ver7.30 or later

② MECHATROLINK-III Communications References Sigma-7S (SGD7S-****20*) SERVOPACK (Rotary, Linear type)
Controller

Controller			Support Version
MP3000 Series	MP3200	Rotary	Ver1.12 or later
		Linear	Ver1.14 or later
	MP3300	Rotary	Ver1.10 or later
		Linear	Ver1.14 or later
MP2000 Series	Built-in SVC	Rotary	Ver2.88 or later
		Linear	Ver2.89 or later

Option Module

Module		Support Version
SVC-01	Rotary	Ver1.12 or later
	Linear	Ver1.13 or later

Engineering Tool

Tool		Support Version
MPE720	Rotary	Ver7.27 or later
	Linear	Ver7.30 or later

③ MECHATROLINK-III Communications References Sigma-7W (SGD7W-****20*) SERVOPACK of 2-axis driving model (Rotary , Linear type)

Controller

Controller			Support Version
MP3000 Series	MP3200	Rotary	Ver1.12 or later
		Linear	Ver1.14 or later
	MP3300	Rotary	Ver1.10 or later
		Linear	Ver1.14 or later
MP2000 Series	Built-in SVC	Rotary	Ver2.88 or later
		Linear	Ver2.89 or later

Option Module

Module		Support Version
SVC-01	Rotary	Ver1.12 or later
	Linear	Ver1.13 or later

Engineering Tool

Tool		Support Version
MPE720	Rotary	Ver7.28 or later
	Linear	Ver7.30 or later

No. 2 The servo trace cooperation function was added to the Real-Time Trace function.

In the Real-Time Trace function, the Motion Analyzer screen which can display controller trace (scan time cycle) and servo trace (cycles of 125 us) on one screen was added.

The trace data of two or more SERVOPACKs connected in MECHATROLINK-III communication is simultaneously acquirable.

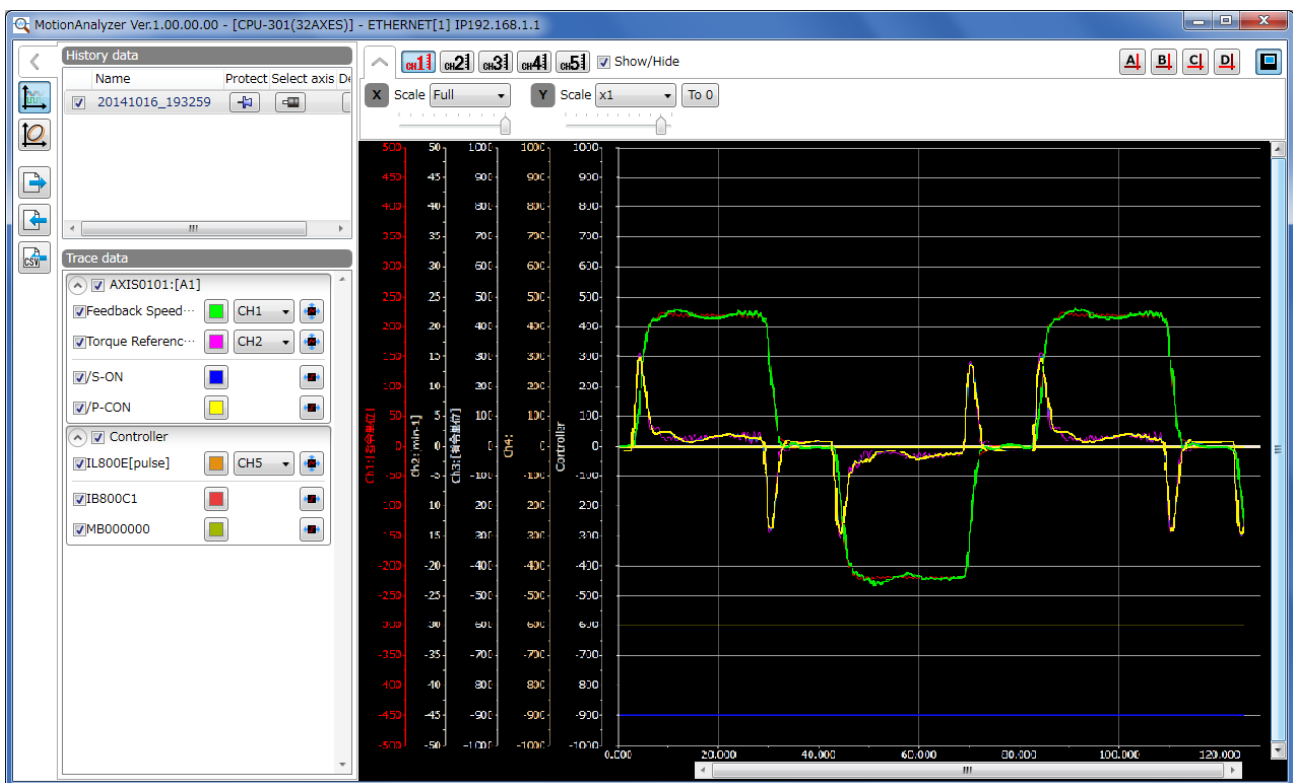
* It is simultaneously acquirable to a maximum of 4 axes.

1. Sampling & Trigger Setting Screen

The setting screen of servo trace was added to the sampling & trigger setting screen of the Real-Time Trace function.

2. Motion Analyzer screen

The Motion Analyzer screen which can display simultaneously the register data which wants to acquire the trigger signal and instruction value of a controller etc., and servo trace data was added.



【Support Version】

Controller

Controller	Support Version
MP3000 Series	Ver1.12 or later
MP2000 Series	Unsupported

Option Module

Module	Support Version
SVC-01	Unsupported

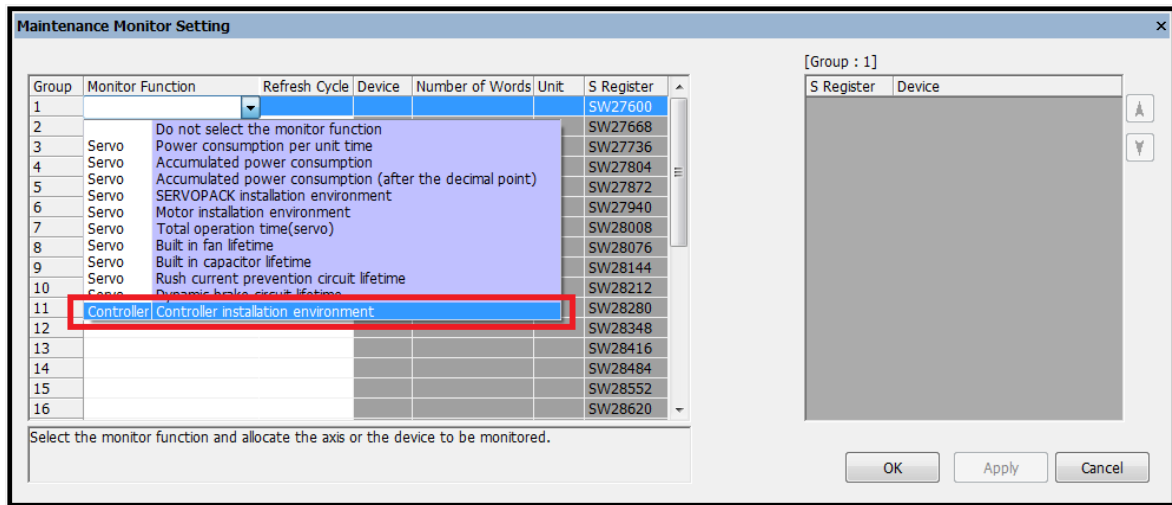
Servo

SERVOPACK	Support Version	
Σ-7S	M-II	Unsupported
	M-III	It is not dependent on the version.
Σ-7W	It is not dependent on the version.	

No. 3 The "Controller installation environment" was added to the Maintenance Monitor function.

The "Controller installation environment" of the controller was added to the monitor item which can be set up in the Maintenance Monitor function.

The "Controller installation environment" can monitor the temperature environmental impact of a controller.



【Support Version】

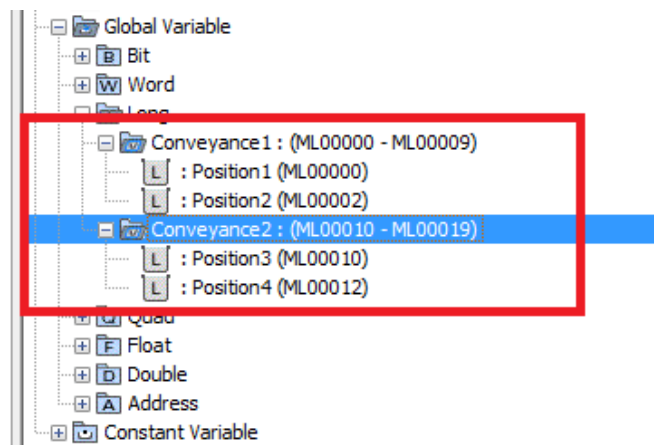
Controller		Support Version
MP3000 Series	CPU-201	Unsupported
	CPU-201(SUB)	
	CPU-202	Ver1.14 or later
	CPU-202(SUB)	
	CPU-301(16axes)	
CPU-301(32axes)		
MP2000 Series		There is no correspondence.

No. 4 The group display mode of the variable was added.

The function which can group a variable was added in the global variable and the local variable of the variable window.

【Setup steps】

1. Choose "Add to Group" of the right-click menu of a variable window.



【Support Version】

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

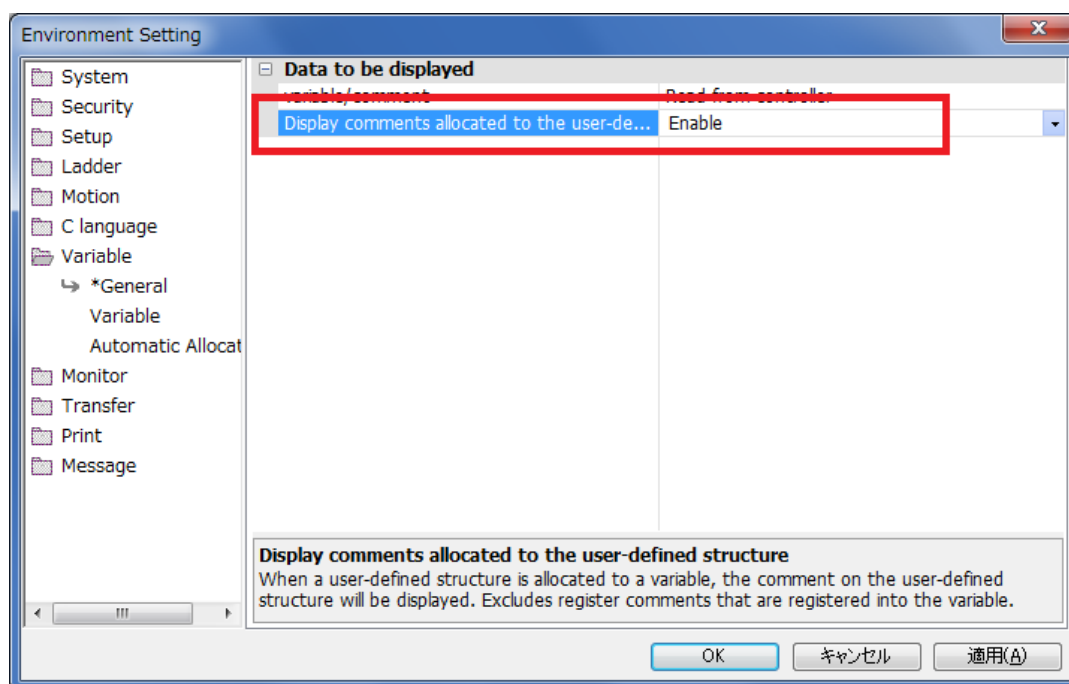
No. 5 The structure comment operational mode was added.

The mode which indicates the variable comment of each member which defined in the user structure at the variable comment of a structure which set up the register number was added.

Moreover, the reference comment export function of the Axis variable, the IO variable, and the Global variable was added to the export function of the variable and comment.

【Setup steps】

1. Chose to "File" menu -> "Environment Setting"
2. Chose to "Variable" tab -> "General".
3. Set up "Enable" in "Display comments allocated to the user-defined structure".

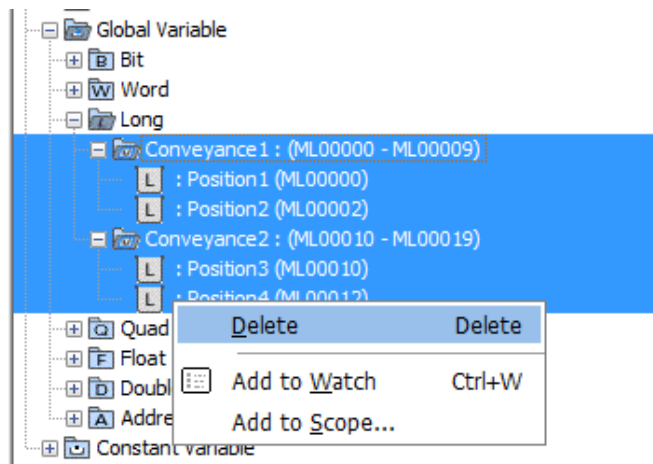


【Support Version】

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

No. 6 Multiple selection operation was added about the variable and the structure.

In the Variable window, when two or more variables and structures are chosen, it changed so that "Delete", "Add to Watch", and "Add to Scope" operation might be 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. 7 The parameter was added to Fixed Parameter and Setting Parameter of SVC-01 module.

The following parameter was added to Fixed Parameter and Setting Parameter.

○Fixed Parameter: Function selection flag 2 Bit5

Multiturn Limit Setting Mismatch Detection Mask

It is set up at the time of finite length whether the mismatch of the multiturn limit setting is detected.

○Setting Parameter (OWxx05 Bit2): Function setting 3 Bit 2

External Positioning Final Travel Distance Write

It is set up at the time of external positioning whether the external positioning final travel distance is automatically reflected in SERVOPACK.

The setting is reflected at the time of "External Positioning" and "Jog Mode with External Positioning" of the motion command start.

【Support Version】

Controller

Controller	Support Version
MP3000 Series Built-in SVC	Ver1.14 or later
MP2000 Series Built-in SVC	Ver2.89 or later

Option Module

Module	Support Version
SVC-01	Ver1.13 or later

No. 8 The parameter was added to Fixed Parameter of SVB-01 module.

The following parameter was added to Fixed Parameter.

○Fixed Parameter: Function selection flag 2 Bit5

Multiturn Limit Setting Mismatch Detection Mask

It is set up at the time of finite length whether the mismatch of the multiturn limit setting is detected.

【Support Version】

Controller

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series Built-in SVB	Ver2.89 or later

Option Module

Module	Support Version
SVB-01	Ver1.33 or later

No. 9 When Sigma-7 series SERVOPACK was used, the operation of the SigmaWin+ cooperation function has been improved.

When two or more SGD7W was used, since the following phenomena might occur. So, this has been improved.

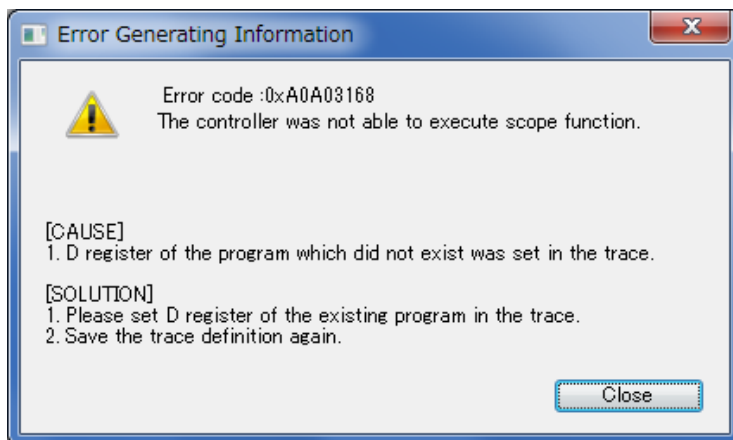
1. In the Module Configuration of MC-Configurator, when the function list is opened, the message of the system error (0xA0A3FFFF) is displayed.
2. When the SigmaWin+ cooperation function of MC-Configurator is started, the message of the system error (0xA0A3FFFF) is displayed.

【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 error message of Trace function has been improved.

In the Trace function (Real-Time Trace, Trace Manager), when the start button is pushed, the error message displayed when trace is not able to be performed has been improved.



【Support Version】

Controller	Support Version
MP3000 Series	Ver1.14 or later
MP2000 Series	It is not dependent on the version.

No. 11 The display refresh timing of Trace Manager has been improved.

In the Trace Manager function, since there was a case where the current value of the register registered into the Trace Manager and the actual current value are different. So, this has been improved.

When trace data was acquired by the specific operation method, the value of the register registered last time may be displayed, the actual value and the current value of the register registered into the Trace Manager are different.

【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 BUTTON display mode of the Watch function has been improved.

Since there was a phenomenon in which the BUTTON display was not correct when the Bit type register of C register was registered into the Watch function, display mode was changed into "BUTTON" mode and ON/OFF was changed. 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 cross reference operation of the register used in the Motion Program has been improved.

In a specific project file, when the register used in the Motion Program refers to the Cross Reference function, since there was a phenomenon which the register was not displayed on search results. So, this has been improved.

【The conditions which a phenomenon generates】

": all program " is set as a search condition

【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 operation of the SigmaWin+ function at the time of SGD7W use has been improved.

1. In the Trace function (Real-Time Trace, Trace Manager), when the start button is pushed, the error message displayed when trace is not able to be performed has been improved.
2. In the Servo Alarm function called from the System Monitor function, when it is the servo of the expansionist address of Sigma-7W #0: Normality, and the servo of the expansionist address #1: Servo alarm generating, since there was a phenomenon which displays the Servo Alarm function of the expansionist address #0. 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 Version Information function of MC-Configurator has been improved.

In the Version Information function of MC-Configurator, since there was a phenomenon in which MC-Configurator was frozen when UnSupportDevice existed in allocation of motion module. So, this has been improved.

【Support Version】

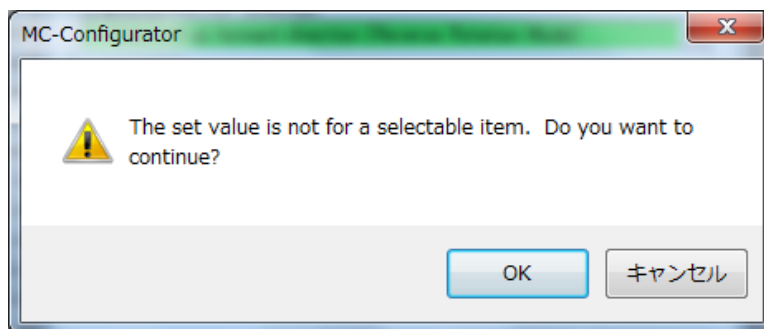
Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 16 The operation at the time of parameter edit of Sigma-5-MD has been improved.

In the Servo Parameter function of MC-Configurator, if the parameter of the selection is edited and the OK button is depressed, in spite of having chosen from selection items, since there was a phenomenon in which the message of “The set value is not for a selectable item. Do you want to continue?” was displayed. So, this has been improved.

* The parameter of relevance

Pn000, Pn001, Pn002, Pn008, Pn009, Pn00B, Pn00D, Pn10B, Pn139, Pn160, Pn310, Pn460, Pn530, Pn800

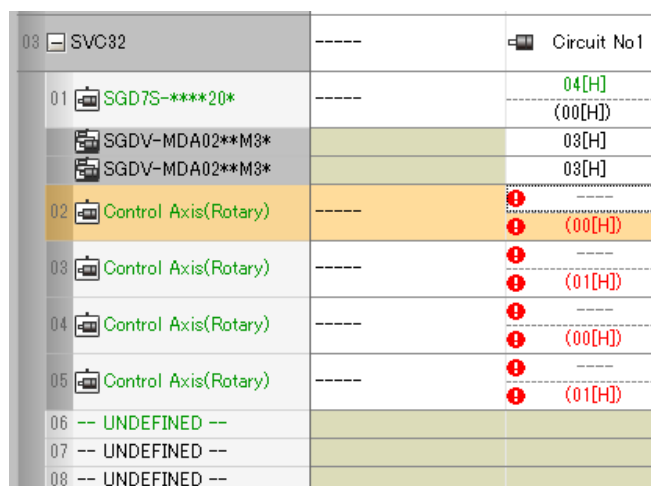


【Support Version】

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

No. 17 The display of the module allotment of MC-Configurator has been improved.

In the Module Configuration screen of MC-Configurator, since there was a phenomenon in which the display of the multi-axis servo collapsed after making the module allocation by a specific operating procedure. 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. 18 The print function of the Ladder Program has been improved.

In the print function of the Ladder Program, since there was a phenomenon in which MPE720 froze when the check was attached to all the detailed options (Drawing Tree, Drawing List, Function Configuration, Tuning Panel, and Update History) and was printed. So, this has been improved.

【Controller which a phenomenon generates】

MP2200-02, MP2200-03, MP2200-04

【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 print function of RIOTOOL has been improved.

In the Print function of RIOTOOL, since there was a phenomenon in which the notation of I register and O register defined on the detailed definition of 120IO (215) of the Module Configuration and the notation of I register and O register outputted by the Print function were opposite. So, this has been improved.

The notation of I register and O register outputted by the Print function was a mistake.

【Support Version】

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