

## **Upgrade Information of MPE720 Version 7.84**

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

#### **1.1 Version 7.84 Upgrade Information**

Items added and features improved from MPE720 version 7.83 to version 7.84 are as follows.

No.	Feature	Classification
1	Added motion command for Custom Operation.	New Function
2	Improved motion program screen for comparing with project files.	Improving
3	Improved copy & paste of CP ladder.	Improving
4	Improved keeping the setting value after selecting a servo model.	Improving

## 2. Description

### No. 1 Added motion command for Custom Operation.

Added new motion command 'Custom Operation' for M-4 servo.

- 1) With M-4 servo, "40: Custom Operation" can be selected for motion command in setting parameter.

1	2	*	Address	Axis0101 Circuit#01 Axis#01 SGDXS-****40*
+ 0	:	Run command setting	0W8000	0000[H]
+ 1	:	Mode setting 1	0W8001	0000[H]
+ 2	:	Mode setting 2	0W8002	0000[H]
+ 3	:	Function setting 1	0W8003	0011[H]
+ 4	:	Function setting 2	0W8004	0033[H]
+ 5	:	Function setting 3	0W8005	0000[H]
+ 6	:	M-4 Vendor Specific Servo Comman**	0W8006	0000[H]
8	:	Motion command	0W8008	40 : Custom Operation
+ 9	:	Motion command control flag	0W8009	0000[H]

- 2) Added "Custom Reference 1 ~ 5" for setting parameter.
- 3) Added "Custom Operation" for motion command response code of monitor parameter.

[Supported Versions]

○Controller

Controller	Supported Firmware Version
CPU-203F	1.65

## No.2 Improved motion program screen for comparing with project files.

When comparing with project files, motion program comparison screen could not be displayed. So, it 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.
Σ-FT Series	Not dependent on the controller version.

## No.3 Improved copy & paste of CP ladder.

Copy & paste using F4 and F5 key could not be executed on CP ladder editor. So, it 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.
Σ-FT Series	Not dependent on the controller version.

#### **No.4 Improved keeping the setting value after selecting a servo model.**

When selecting a servo model in detailed servo setting of module configuration definition after importing MNI file in M-4 communications extension setting, the setting values (like input/output size) in the MNI file were initialized. So, it has been improved to keep the setting value.

[Supported Versions]

○Controller

Controller	Supported Firmware Version
YRM-X	Not dependent on the controller version.
MP3000 Series	Not dependent on the controller version.
Σ-FT Series	Not dependent on the controller version.

**Appendix A:**

**[About compile of the parallel circuit]**

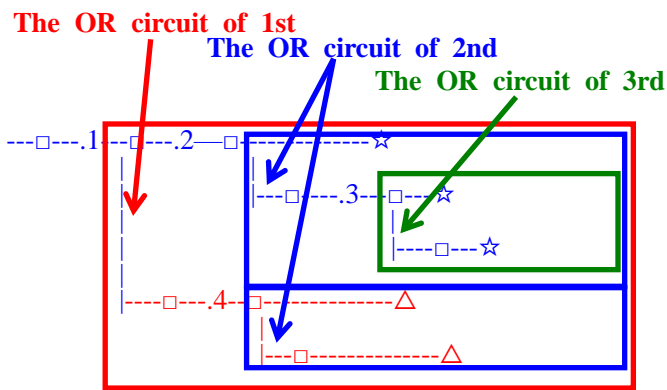
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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.



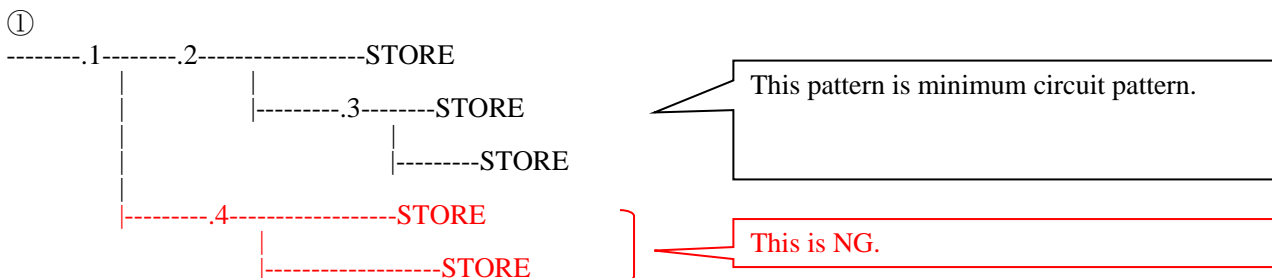
The OR circuit of 1st class: The OR circuit branched from the bus-bar of language.  
 The OR circuit of 2nd class: The OR circuit branched out of the OR circuit of 1st class.  
 The OR circuit of 3rd class: The OR circuit branched out of the OR circuit of 2nd class.

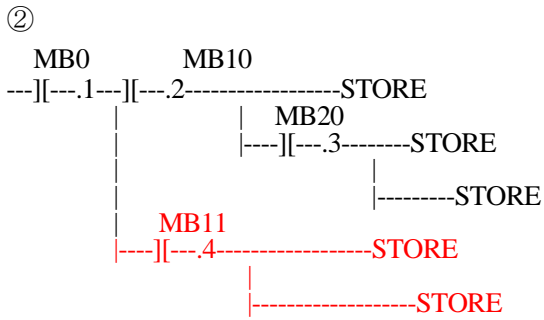
□(Conditional instruction): NO Contact, NC Contact, Coil, instruction(==, !=, >, <), power line (-----) etc.  
 ☆(Output instruction): Coil, Block instruction(Expression, STORE, COPYW) etc  
 ※However, when all ☆ is coil commands, a phenomenon does not occur.  
 △(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
	NO Contact
STORE	STORE instruction
( )	Coil

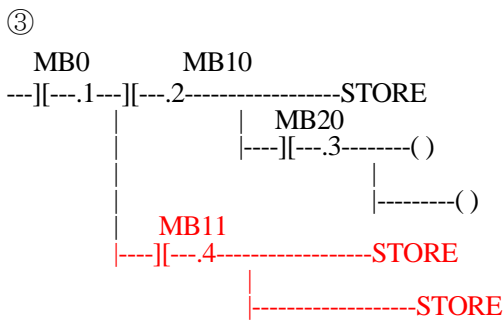
<NG Pattern>





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

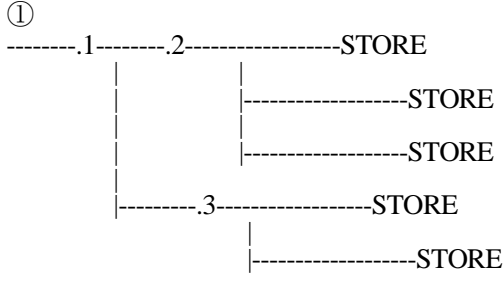
This is NG



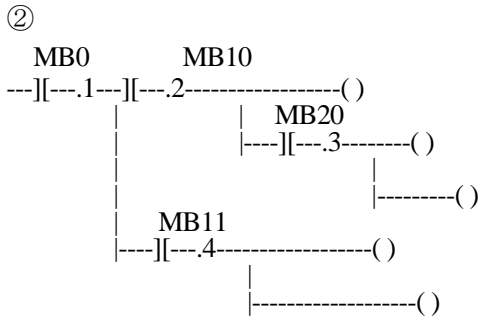
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

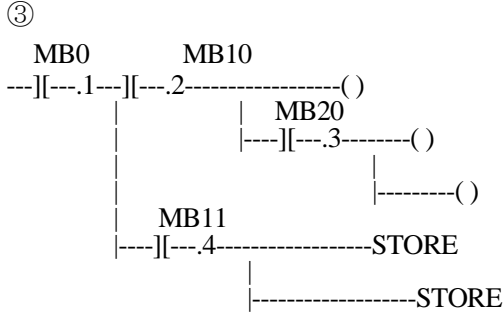
<OK Pattern>



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.

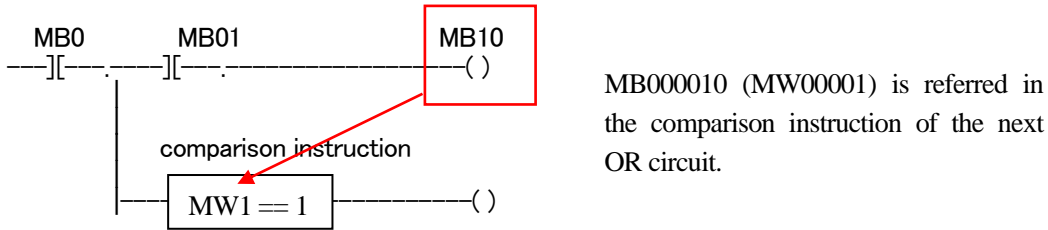
## Appendix B:

### 【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.

## Appendix C:

### 【About high DPI setting】

When MPE720 Ver.7 is started on a computer that supports high DPI such as a 4K display, part of MPE720 screen may not be displayed depending on the resolution and scale settings. From MPE720 Ver.7.67, the high DPI setting of MPE720’s property is set to disable. This avoids phenomena such as the screen being cut off. If you want to use the high DPI setting, please change the MPE720 Ver.7’s property setting.

**Appendix D:**  
**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
35	<a href="#">MPE720 version 7.64 upgrade information</a>	version 7.63→version 7.64
36	<a href="#">MPE720 version 7.65 upgrade information</a>	version 7.64→version 7.65
37	<a href="#">MPE720 version 7.66 upgrade information</a>	version 7.65→version 7.66
38	<a href="#">MPE720 version 7.67 upgrade information</a>	version 7.66→version 7.67
39	<a href="#">MPE720 version 7.70 upgrade information</a>	version 7.67→version 7.70
40	<a href="#">MPE720 version 7.81 upgrade information</a>	version 7.70→version 7.81
41	<a href="#">MPE720 version 7.82 upgrade information</a>	version 7.81→version 7.82
42	<a href="#">MPE720 version 7.83 upgrade information</a>	version 7.82→version 7.83