

## **Upgrade Information of MPE720 Version 7.85**

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

#### **1.1 Version 7.85 Upgrade Information**

Items added and features improved from MPE720 version 7.84 to version 7.85 are as follows.

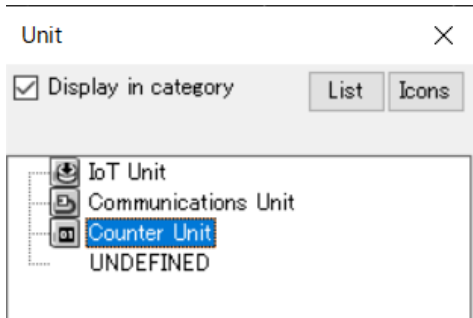
No.	Feature	Classification
1	Added counter unit (PI-01C) for YRM-X controller.	New Function
2	Expand FC unit slots for YRM-X controller.	New Function
3	Improved security function.	Improving
4	Improved converting MAL file.	Improving
5	Improved FTP client problem that password can only use uppercase.	Improving
6	Improved problem that auto-updated parameters of setting parameter are not hatched.	Improving

## 2. Description

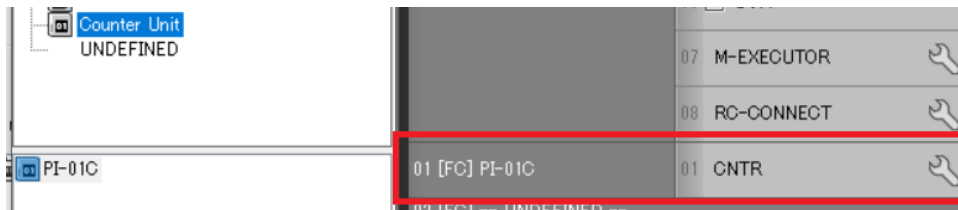
### No. 1 Added counter unit (PI-01C) for YRM-X controller.

Added new counter unit (PI-01C) for FC unit of YRM-X controller.

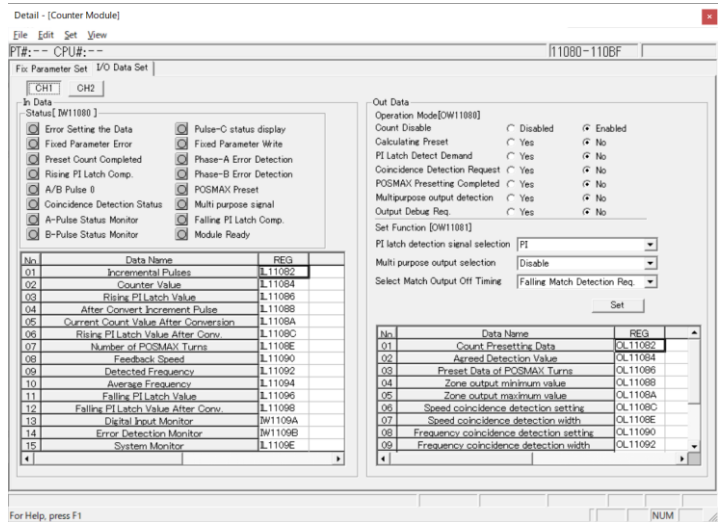
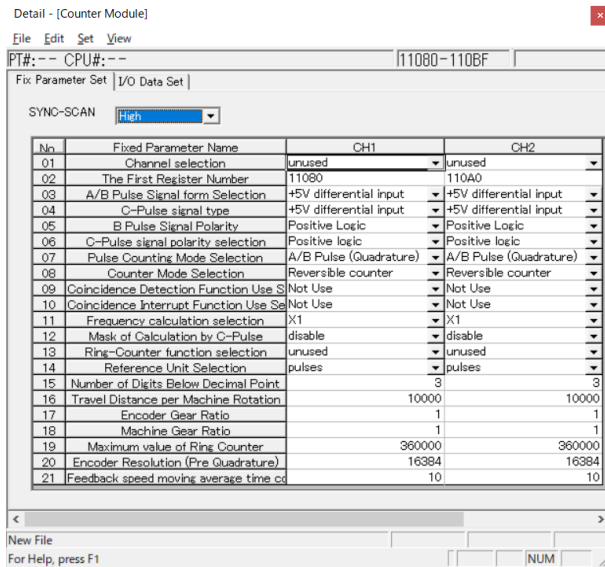
1) Added "Counter Unit" category to FC unit selection screen of YRM-X.



2) PI-01C can be selected as counter unit and assigned for FC unit (up to 8 units).



3) Fix Parameter and I/O Data can be set on detailed definition screen of function module CNTR of PI-01C.



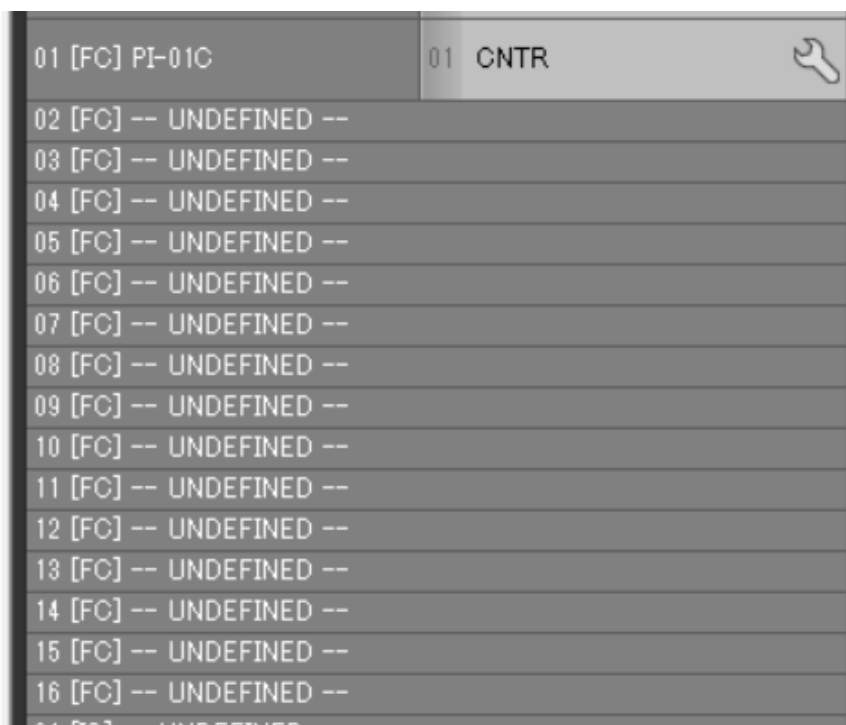
### [Supported Versions]


○Controller

Controller	Supported Firmware Version
YRM-X	1.07

## No.2 Expand FC unit slots for YRM-X controller.

Before Ver.7.84, YRM-X had just 9 FC unit slots (1 for IOT, 8 for CM-CF02, total 9 max), but PI-01C was added as FC unit in Ver.7.85. So the FC unit slots of module configuration definition has been expanded to 16.



01 [FC] PI-01C	01 CNTR	
02 [FC] -- UNDEFINED --		
03 [FC] -- UNDEFINED --		
04 [FC] -- UNDEFINED --		
05 [FC] -- UNDEFINED --		
06 [FC] -- UNDEFINED --		
07 [FC] -- UNDEFINED --		
08 [FC] -- UNDEFINED --		
09 [FC] -- UNDEFINED --		
10 [FC] -- UNDEFINED --		
11 [FC] -- UNDEFINED --		
12 [FC] -- UNDEFINED --		
13 [FC] -- UNDEFINED --		
14 [FC] -- UNDEFINED --		
15 [FC] -- UNDEFINED --		
16 [FC] -- UNDEFINED --		

[Supported Versions]

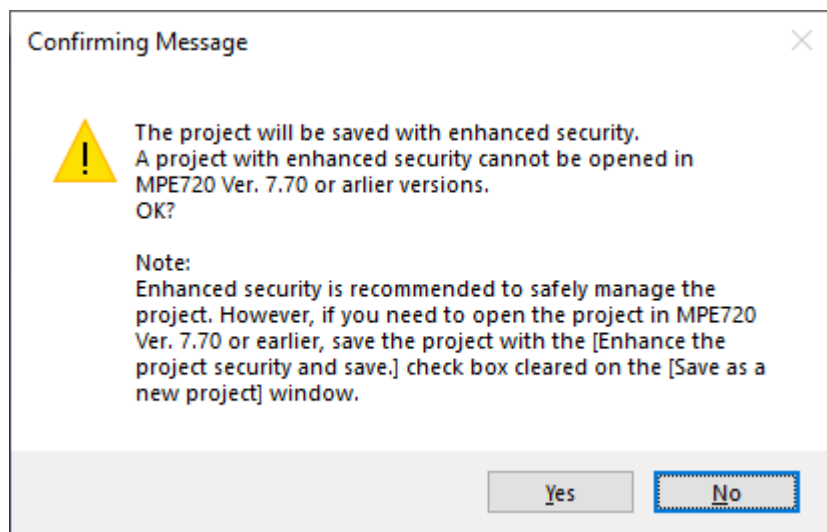
○Controller

Controller	Supported Firmware Version
YRM-X	Not dependent on the controller version.

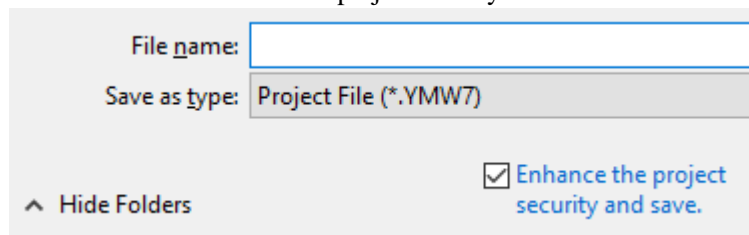
### No.3 Improved security function.

The following improvements have been made to support enhanced security for MPE720 Ver.7.

1) When creating a new security-enhanced project, the following warning message is displayed.



2) If the project is opened, the check box status for enhanced security displayed when New Project or Save as a New Project, is become the same as the project security status.



3) Above 1 and 2 improvements are also same about the project conversion.

- A warning message will be displayed if security enhancement is enabled when the conversion is executed.
- The status of the check box of project conversion follows the state of the source project.

[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 SGD7C model	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.
Σ-X Series FT model	Not dependent on the controller version.

#### No.4 Improved converting MAL file.

MAL file of MPE720 Ver.5 could not be converted well after Ver.7.81. So, this has been improved.

[Supported Versions]

○Controller

Controller	Supported Firmware Version
MP2000 Series	Not dependent on the controller version.

#### No.5 Improved FTP client problem that password can only use uppercase.

When the language is English, FTP client password could only be entered in uppercase letters. 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 SGD7C model	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.
Σ-X Series FT model	Not dependent on the controller version.

#### No.6 Improved problem that auto-updated parameters of setting parameter are not hatched.

About Σ-X and Motion module of YRM-X, auto-updated parameters of setting parameter were not hatched in yellow on module configuration definition screen (this means not recognized as auto-updated parameter). As a result, the auto-updated parameter's "Apply to initial value" on the setting parameter screen was not working. 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 SGD7C model	Not dependent on the controller version.
MP2000 Series	Not dependent on the controller version.
Σ-X Series FT model	Not dependent on the controller version.

## Appendix A:

### 【About compile of the parallel circuit】

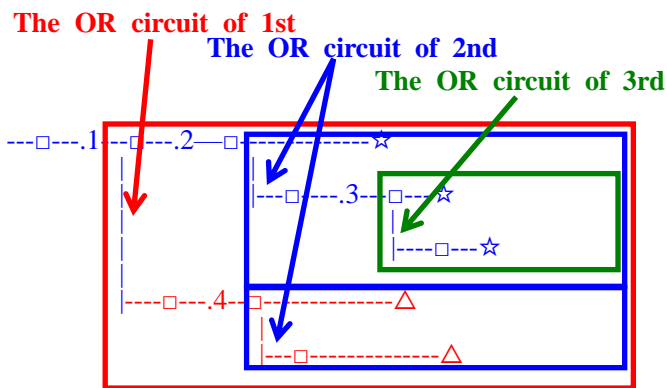
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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.

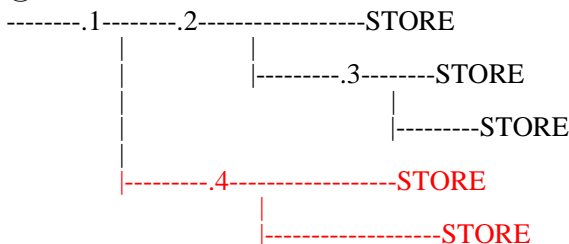
△(Output instruction): Coil, Block instruction(Expression, STORE, COPYW)etc

<Pattern>

Symbol	Instruction
	NO Contact
STORE	STORE instruction
( )	Coil

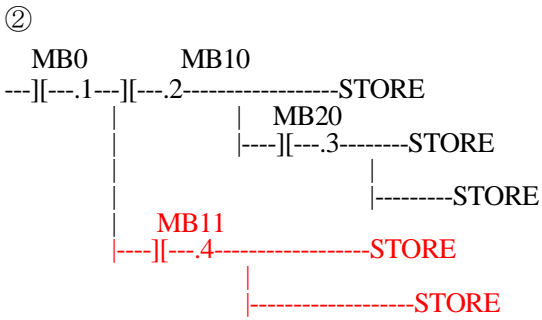
<NG Pattern>

①



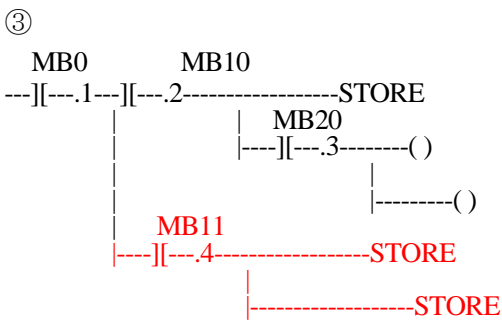
This pattern is minimum circuit pattern.

This is NG.



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

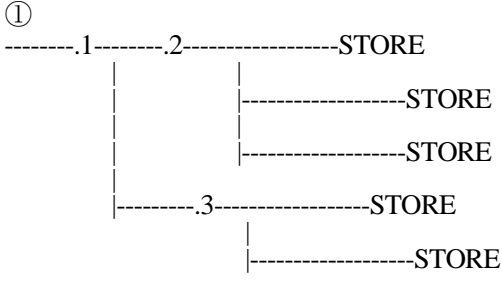
This is NG



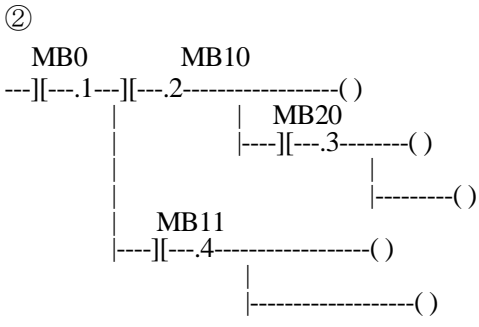
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

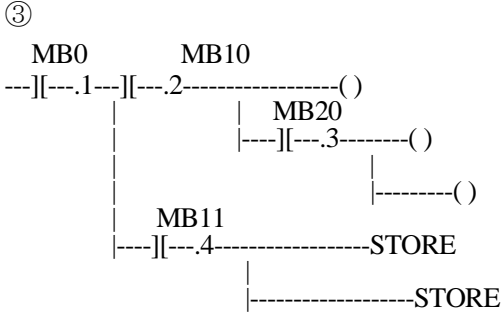
<OK Pattern>



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.

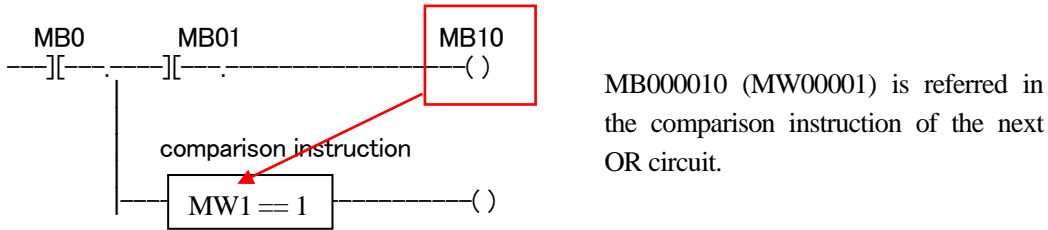
## Appendix B:

### 【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.