

MPE720 Ver.7.86 version upgrade information

1. Function addition/improvement items

1.1 Ver.7.86 version upgrade information

The following are the items to add or improve MPE720 Ver.7.85→ Ver.7.86 functions.

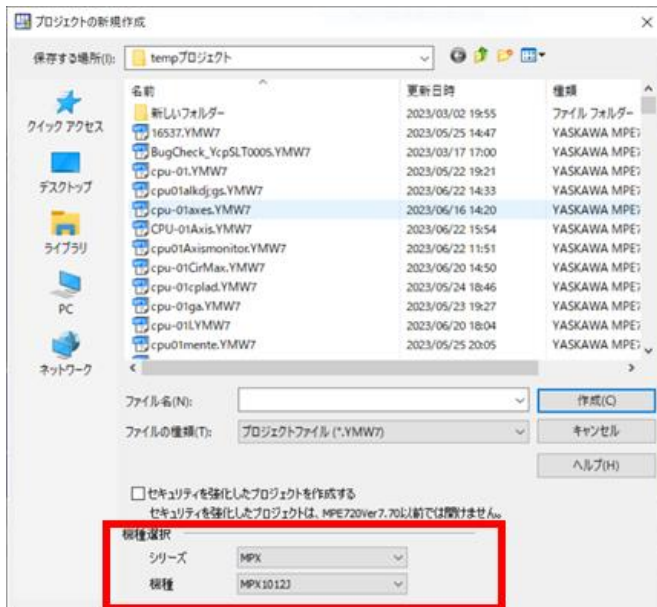
| No. | Function items | Classification |
|-----|---|----------------|
| 1 | AMPX series-controller MPX1012J was added. | New Function |
| 2 | The menu bar configuration has been changed. | New Function |
| 3 | The multi-scan function is supported. | New Function |
| 4 | Enabled IO offset-setting for EtherNet/IP modules in MPX controllers. | New Function |
| 5 | Fixed a bug that prevented FTP configuration on CPU-203 controllers. | Improving |
| 6 | Fixed a bug that prevented the "Display all registers" of the G register from being displayed in the comment list on a specific model. | Improving |
| 7 | Fixed a malfunction in English and Chinese (simplified characters) that caused the error message to be lettered when creating new table data. | Improving |
| 8 | Fixed a bug where character string data was garbled when importing table data. | Improving |
| 9 | Fixed a problem that caused incorrect position monitor values in Σ -XS. | Improving |
| 10 | Fixed a problem in YRM-X controllers where the selection of the replacement target for projects is up to 32 axes. | Improving |

2. Description

No. 1 MPX series-controller MPX1012J was added.

Added MPX1012J as a MPX series-controller.

- 1) You can create a project file by specifying the series name "MPX" and model "MPX1012J".



- 2) It can be engineered by connecting to a MPX1012J.

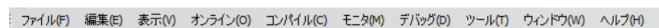
[Response Versions]

○Controller

| Controller | Supported firmware versions |
|------------|-----------------------------|
| MPX | 2.00 |

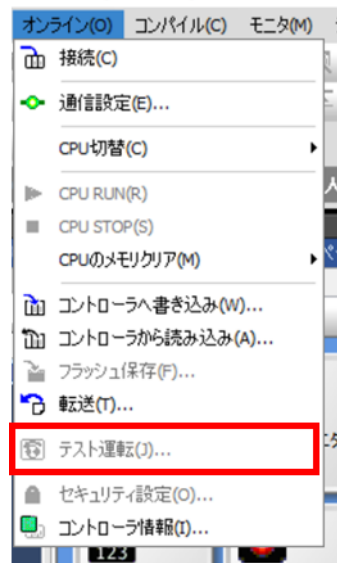
No. 2 Menu-bar configuration has been changed.

1)"Monitor" and "Tool" have been added to the menu bar items.

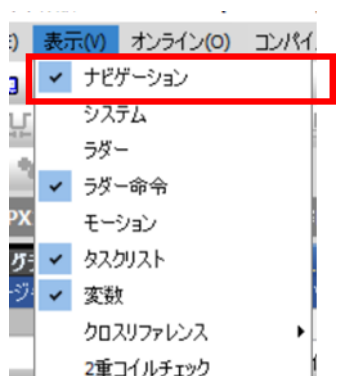


2)"Test operation" was added to "Online" in the menu bar item.

YX1012JEco [MPX1012J]



3)"Navigation" was added to "Display" of the menu bar item.



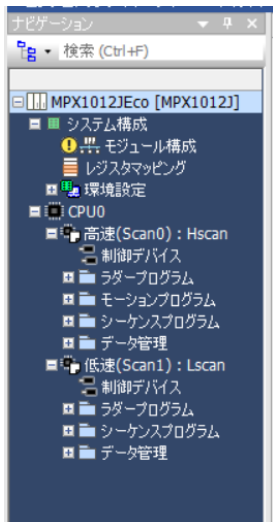
No. 3 Multi-scan function is supported.

The following functions are available for multi-scan compatible models.

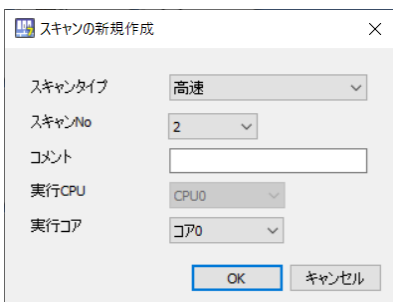
[Multi-scan compatible model]

| Series | Controller |
|--------|------------|
| MPX | MPX1012J |

1)The navigation window was added.



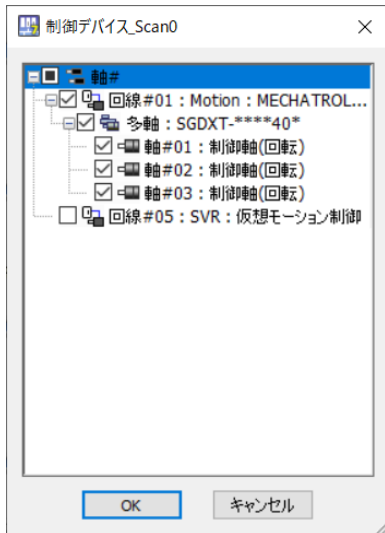
2)Scans can be newly created and deleted.



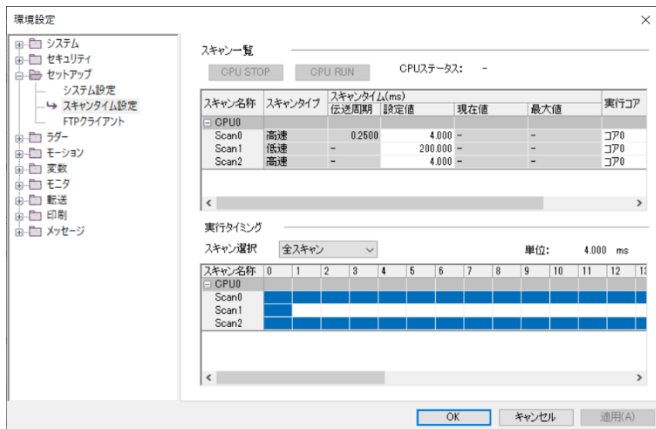
3)Register assignment can be set for scanning.



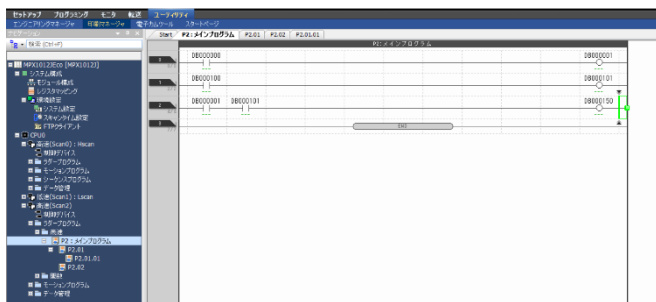
4)Control device settings for scanning are available.



5)The scan time setting screen is compatible with the multi-scan function.



6)With a newly added scan, you can create P drawings as ladder drawings.



No.4 Enabled IO offset setting of the adapter for the built-in functional module EtherNet/IP of MPX controller.

In EhterNet/IP of functional modules with built-in controllers, a function to set conversion rules to adjust byte-by-word data in EtherNet/IP communication packet data was added.

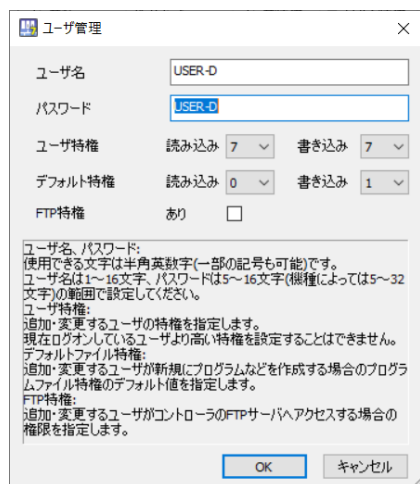


[Compatible controller]

| Controller | Supported firmware versions |
|---------------|-----------------------------|
| MPX::MPX1012J | 2.00 |

No.5 Fixed a bug that prevented FTP setting in the user control window in CPU-203 project.

1) You can set FTP privilege on the user control window of the target controllers.



2)On the target controllers, the checking process was added so that the number of users with FTP privilege is 5.

3)Fixed a bug that could be registered when a number, ".", or "-" was used as the start character of the user name in the target controller.

[Compatible controller]

○Controller

| Controller | Supported firmware versions |
|------------|-----------------------------|
| CPU-203 | 1.50 Following |
| CPU-203F | 1.50 Following |
| NSC-833 | 1.50 Following |
| NSC-834 | 1.62 Following |

No.6 Fixed a bug that prevented YRM-X controllers from displaying comment lists properly.

For YRM-X controllers, an error message "Not enough memory" was displayed when "Display all registers" of G register is selected in the comment list. This has been corrected.

[Compatible controller]

○Controller

| Controller | Supported firmware versions |
|------------|---|
| YRM-X | It does not depend on the controller version. |

No. 7 improved error messages when compiling tables in English and Chinese environments.

In the English and Chinese (simplified type) environment, there was a problem in which the error message when data was stored without being input when the table data was newly created became corrugated. This was corrected.

No.8 Improved the bug where character string data is garbled when importing table data.

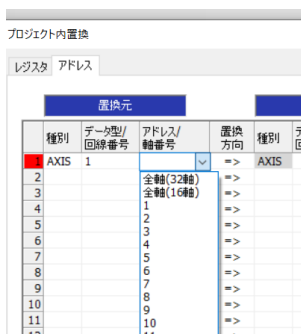
In the import of table data, there was a bug where character string data is garbled. This has been corrected.

No.9 Improved the problem of incorrect position monitor when Σ-XS is assigned.

When the Σ-XS was assigned, there was a problem in which the position monitor reading was displayed as "-", so we corrected this.

No.10 Improved the problem that the max. number of axes for in-project replacement is 32 in YRM-X controller.

In the project for YRM-X controllers, there was a problem in which the selection of the axis number when the type "AXI" S was selected was up to 32 axes when the within-project replacement was executed. Thus, we have corrected this so that up to 64 axes can be selected.



Appendix A:

[About compile of the parallel circuit]

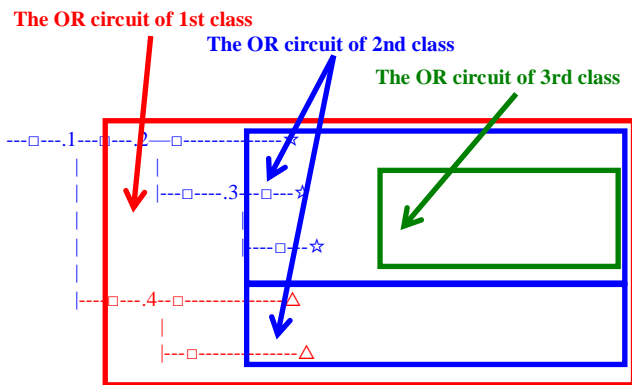
In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<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 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

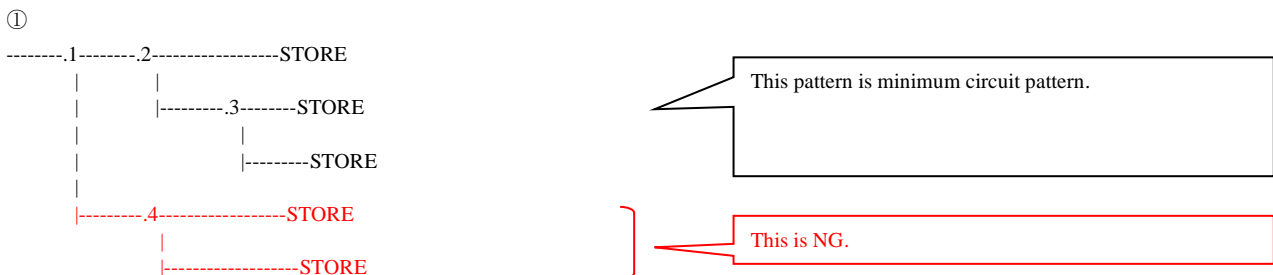
※However, when all ☆ is coil commands, a phenomenon does not occur.

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

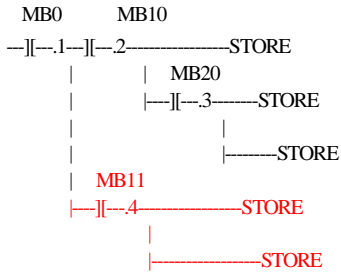
<Pattern >

| Symbol | Instruction |
|--------|-------------------|
| I | NO Contact |
| STORE | STORE instruction |
| () | Coil |

<NG Pattern >



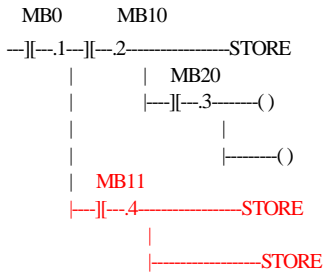
②



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

This is NG

③

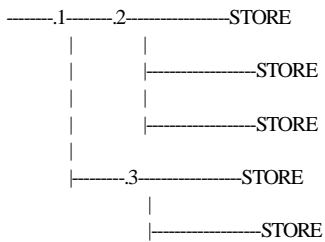


It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

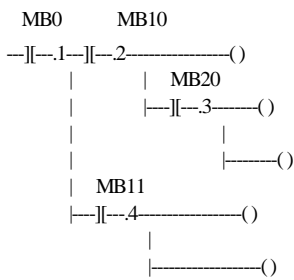
<OK Pattern >

①



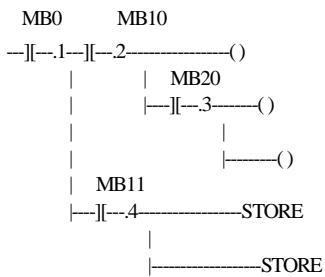
Since it is the OR circuit of 2nd, it is OK.

②



Since it is the coil altogether, it is OK.

③



Since it is the coil altogether, it is OK.

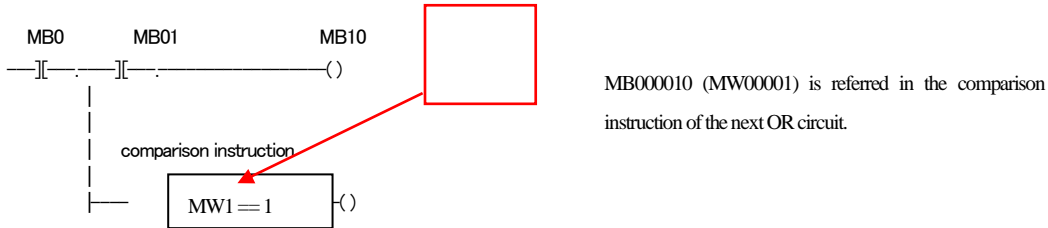
Appendix B:

【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 Ver7 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.