

Upgrading the MICREX-SX Series Programming Support Tool

1. Applicable model

IEC 61131-3-compliant programming support tool: SX-Programmer

Type	Name	Newest version	Date of upgrade
NP4H-SWN	Standard	V2.3.2.0	May 2007

2. Upgrade service details

This new service gives registered users of Standard direct access to the latest version of the software through the upgrade feature on the Fuji Electric FA website. Users can download the most recent version of the software from the website at their convenience.

Name of the upgrade file for SX-Programmer: StandardUpdateV2320.exe

3. Main changes in the latest version: V2.3.2.0 (May 2007)

- 1) Adding system definition functions
Adding such functions as the naming change of power supply and base board, gateway setting of Ethernet module, and the naming change of battery error detection.
- 2) Expansion of password functions
The password length used for program protection has been extended from 8 characters to 20 characters.
- 3) Uploading Ethernet setting
An upload function of Ethernet setting file that had been downloaded to module has been installed.
- 4) Registration of always ON/OFF NO/NC contact
Adding "Always ON normally open contact", "Always OFF normally closed contact", "Always ON normally closed contact", and "Always OFF normally closed contact. to the contact barrette in edit mode.
- 5) Specifying address/tag color of local devices
Adding the color specifying function to addresses and tags to the device allocated to a local device.
- 6) Storing the dialog box display position
Adding the function to maintain the position where the dialog box displayed in the editor while the programming support tool is running.
- 7) Section number search function (Direct jump)
The section number search function has been added to [Search] in the menu.
- 8) Improved print setting
Adding the device cross-reference I/O batch registration function and number of pages by section in print function.
- 9) Restriction of initial startup
Adding the function of disabling Initial starting operation at PLC startup
- 10) Improvement of conversion function with MICREX-F series PLC
Cut and paste function from MICREX-F series PLC Programmer has been improved.

4. History of main version upgrades

(1)V2.3.1.0 (November 2006)

- 1)Improvement of changed circuit PLC transfer function
Changed circuits can be transferred to PLC even if insertion, import, or pasting has been made to programs.
- 2)Board controller support — optional card

(2)V2.3.0.0 (October 2006)

1) System configuration upgrade

A function was added to restore system configuration information (Module name) during online connection.

2) Output of data text file

A function was added to output data files (stored by save function) that are stored in resource folder to a user specified arbitrary folder, in comma-separated text file format (CSV).

3) Improvement in model-to-model cut and paste function

Cut and paste function from MICREX-F series PLC was improved.

4) Tag support for section instruction

A function to set comments (tags) to section instruction was added.

5) Outputs/reads initial values to/from text file

A function to output the device's initial value set by the initial value setting list function in text file format (CSV) and a function to read the outputted text file were added.

6) Input switching on initial value setting list

Input method switching function (decimal number input/hexadecimal number input) was added to the initial value setting list function.

7) Improved printing with device cross-reference

Simultaneous tag printing function was added in printing with device cross-reference.

8) Text format output of device cross-reference information

A function was added to output device cross-reference information in comma-separated text file format (CSV).

9) Problem correction

A problem that online connection or global memory monitor did not work properly if SPH300 (NP1PS-245R) was used in multi-CPU configuration was corrected.

(3)V2.2.4.0 (August 2006)

1) Servo Systems FALDIC ALPHA5 support

2) V2.2.3.0 Problem correction

SPH2000(NP1PM-48E/NP1PM-256E) did not allow correct access of FTP. This problem was corrected.

(4)V2.2.3.0 (May 2006)

1) Import of arrangement and structure definitions

A function was added to import arrangement and structure definition data from other projects.

2) Expansion of password functions

A function was added to set restrictions on PLC on-line operation.

By using this function and setting a password for access authentication, PLC operation can be restricted on three levels (i.e., level 1, level 2, and level 3).

The function can also be set restrictions for each access level.

(5)V2.2.2.2 (March 2006)

1) Problem correction

Certain slave module configurations did not allow correct access to IO memory when using a remote IO master module in Standard mode. This problem was corrected.

(6)V2.2.2.1 (January 2006)

1) Improvement in model-to-model cut and paste function

An improvement was made in the model-to-model cut and paste function for the MICREX-F and FLEX-PC series.

2) Instructions added

Master control and model conversion instructions were added.

3) Global counter/Integrating timer

A counter and an integrating timer were added, which are globally accessible from all POUs.

4) Forced setup through ladder editor

A function was added to make forced settings through the ladder editor.

5) SPH300 firmware support

I/O area expansion function (V**64)

System fail-soft startup time minimization function (V**65)

Continuous operation under forced settings (V**65)

(7)V2.2.1.0 (November 2005)

- 1) Support for arrangements and structures
Support was added for arrangements and structures using ladder language and ST language.
- 2) System definition guidance function added
The addition of a guidance function simplifies operation.
- 3) Improved cut-and-paste guidance between MICREX-F types
Performance was improved by converting the MICREX-F program immediately upon being opened.
- 4) Board controller support
Support for board controllers was added.

(8) V2.2.0.0 (August 2005)

- 1) Global timer
A timer device was achieved that can be globally accessed from all POUs.
- 2) Instruction search
A search function was added for instructions for all POUs or for user function blocks and user functions.
- 3) Improved device usage status
Performance was improved by displaying single and double word usage status when the bit device usage status is displayed by the device usage status function for auxiliary functions.
- 4) Improved ladder printing with cross-referencing
Printing efficiency was improved for cross-reference information comprised of POU types, POU numbers, and circuit numbers
- 5) Improved cut and paste between types
Support was added for thirteen previously unsupported instructions when pasting programs for the MICREX-F PLC Programmer to Standard using the clipboard.
- 6) System definition: Enhanced non-mounted operation
Mounted and non-mounted modules can be switched with just one click.
- 7) SPH 2000 support
Support was added for the new-series CPU module SPH2000.

(9)V2.1.1.0 (June 2005)

- 1) Unrestricted setting of addresses for FB parameters
Parameter numbers are no longer automatically allocated in setting parameters for user function blocks and user functions. The user can now make the settings using the desired numbers.
- 2) Ladder information output for POD monitoring
Functions were added to output data to files for performing ladder monitoring using a programmable operation display (POD).
- 3) Output of device data for SX communications middleware
A function was added to the "device data output" function for "auxiliary" to output data for SX communications middleware (NP4N-MDLW).
- 4) ST language support for debugging: Break points and step-by-step execution
Functions for setting break points and for step-by-step execution were added to the ST language screen.
- 5) Improved ST editing
Functions were added to search for and display set tags and to search for and input addresses by inputting tags in ST language programs.
- 6) Improved zoom
A function was added to automatically calculate and save the display magnification as opposed to fixing the initial magnification at 100% when a window is opened (e.g., to open a file or create a new file).
- 7) Maintaining the dialog box display position
A function was added to maintain the display position when the dialog box for inputting addresses or the dialog box for inputting parameters is opened in the ladder language editor.
- 8) Improved cut and paste between MICREX-F series
Changes were made so that when cutting and pasting from a MICREX-F program, the file instruction is pasted after being converted to the user function block call instruction format (i.e., USERFB).

(10)V2.1.0.1 (March 2005)

- 1) Function block diagram expression added
A function was added to express the function block caller in the FBD (block) format.
- 2) Functions added to display and set parameter names on the parameter setting screen
Functions were added to display parameter names and enable the user to set desired names on the parameter setting screen.
- 3) Enhanced editing
Enhancements were added to return circuits, guidance input dialogs, parameter input dialogs, and switching between schematic and collapsible displays for the function block caller.
- 4) Revisions to default common tab items for the instruction pallet
Items set on installation using the common tab for the (default setting) instruction pallet were changed.
- 5) Changing data
A function was added to change data from the ladder screen.
- 6) SPB: SX mode support
SX mode support was added for programming with compact SPB-series PLCs.
- 7) Offline fault diagnosis
Fault diagnosis can be used even when a project is open online.
- 8) More than ten RS-232C port numbers supported
The RS-232C port numbers were increased from 1 to 256.
- 9) ST language support
Support for ST language programming was added.
- 10) Maximum processor link module configuration expanded
The maximum number of processor link modules (e.g., P-link, FL-net) for expansion was increased to eight.
- 11) Start-up without CPU 0 supported
A setting has been added to the system operation definition settings in the system definition to start the system without CPU 0.
- 12) System fail-soft maintenance prohibit operation and fault status indicator mask supported
An expansion setting was added to the system fail-soft start-up operation definitions in the system properties.

5. Backward compatibility

The following table shows the project compatibility for the upgrade.

	Projects created with previous version	Projects created with V2.3.2.0
NP4H-SWN(previous version)	○	△
NP4H-SWN (V2.3.2.0)	○	○

Projects created with the new version cannot be used with the previous version Standard.

6. Upgrading procedure

- (1) Create a new folder on the computer's hard disk.
- (2) Download the V2.3.2.0 upgrade file (StandardUpdateV2320.exe) to the new folder.
- (3) Double click the downloaded file. (The upgrade is a self-extracting file.)
- (4) The file will be extracted to the same folder.
- (5) Double click the extracted Setup.exe file.
- (6) Follow the prompts from the installer program to upgrade the software.
- (7) Standard will start up when the installation is completed. Check Info from the Help menu to make sure the version number is V2.3.2.0

7. Upgrading precautions

- (1) Make sure that NP4H-SWN/Standard is already installed on the computer prior to upgrading the software.
- (2) Do not begin the installation if the upgrade file is not exactly the same size as the file that was downloaded. If they are not the same size, throw all of them into the trash and download the upgrade file again.
- (3) Be sure to quit all programs that are currently running (e.g., Standard or message manager) prior to the

installation.

- (4) If the installation fails due to an error, try to install the software again. If the installation fails again, re-install the previous version of Standard from the setup CD and then try to install the upgrade software again.

You can download the screen creation software NP4H-SWN upgrade version from the Technical Information Service Screen (Free membership).

Enter the Technical
Information Service Site