

Intuitive operability will increase programming efficiency from screen data creation to debugging for NS series.

CX-Designer is the programming software for debugging and creating screen data for NS series including NS, NSJ and NS-Runtime.

Note: The CX-Designer is included in the CX-One FA Integrated Tool Package.



Features

- User interface same as the CX-Programmer
- Symbol table created on the CX-Programmer can be taken into the CX-Designer (Drag and drop).
- Screen data and parts used in other projects can be reused by drag and drop.
- CAD file (DXF file) used for mechanical design can be used as graphic data on the CX-Designer.
- Integrated simulation with PLC ladder program will enhance debugging efficiency.

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Ordering Information

Software

● How to Select Required Support Software for Your Controller

The required Support Software depends on the Controller to connect. Please check the following table when purchasing the Support Software.

| Item | Omron PLC System | Omron Machine Automation Controller System |
|------------------------|-----------------------------------|--|
| Controller | CS, CJ, CP, and other series | NJ-series |
| Programmable Terminals | NS-series | NS-series with an Ethernet port |
| Software | FA Integrated Tool Package CX-One | Automation Software Sysmac Studio |

● FA Integrated Tool Package CX-One

| Product name | Specifications | Specifications | | Model | Standards |
|--|--|--------------------|-------|-----------------------|-----------|
| | | Number of licenses | Media | | |
| FA Integrated Tool Package CX-One Ver.4.□ | The CX-One is a package that integrates the Support Software for OMRON PLCs and components. CX-One runs on the following OS. Windows XP (Service Pack 3 or higher, 32-bit version) / Windows Vista (32-bit/64-bit version) / Windows 7 (32-bit/64-bit version) / Windows 8 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version) CX-One Ver.4.□ includes CX-Designer Ver.3.□. For details, refer to the CX-One catalog (Cat. No. R134). | 1 license * | DVD | CXONE-AL01D-V4 | – |

* Multi licenses (3, 10, 30, or 50 licenses) and DVD media without licenses are also available for the CX-One.

● Automation Software Sysmac Studio

Please purchase a DVD and required number of licenses the first time you purchase the Sysmac Studio. DVDs and licenses are available individually. Each model of licenses does not include any DVD.

| Product name | Specifications | Specifications | | Model | Standards |
|---|---|--------------------|-------|----------------------|-----------|
| | | Number of licenses | Media | | |
| Sysmac Studio Standard Edition Ver.1.□ | The Sysmac Studio is the software that provides an integrated environment for setting, programming, debugging and maintenance of machine automation controllers including the NJ/NX-series CPU Units, NY-series Industrial PC, EtherCat Slave, and the HMI. Sysmac Studio runs on the following OS. Windows 7(32-bit/64-bit version)/Windows 8(32-bit/64-bit version)/Windows 8.1(32-bit/64-bit version)/ Windows 10 (32-bit/64-bit version) The Sysmac Studio Standard Edition DVD includes Support Software to set up EtherNet/IP Units, DeviceNet slaves, Serial Communications Units, and Support Software for creating screens on HMIs (CX-Designer). Refer to your OMRON website for details. | – (Media only) | DVD | SYSMAC-SE200D | – |
| | | 1 license * | – | SYSMAC-SE201L | – |

Note: To connect the NJ5 Controller, NS system version 8.5 or higher is required. CX-Designer version 3.3 or higher is also required.

To connect the NJ3 Controller, NS system version 8.61 or higher is required. CX-Designer version 3.4 or higher is also required.

* Multi licenses are available for the Sysmac Studio (3, 10, 30, or 50 licenses).

Product Configuration

FA Integrated Tool Package CX-One

| Components | Details |
|------------------------|---|
| Introduction | A4 size, English/Japanese |
| Setup disk | (DVD) DVD 1 piece in the case |
| User registration card | Product Registration Guide, Japanese User license agreement/User registration card, English/Japanese |

Automation Software Sysmac Studio

DVD (SYSMAC-SE200D)

| Components | Details |
|----------------------|---|
| Introduction | An introduction about components, installation/ uninstallation, user registration and auto update of the Sysmac Studio is provided. |
| Setup disk (DVD-ROM) | 1 |

License (SYSMAC-SE2□□L)

| Components | Details |
|------------------------|---|
| Introduction | An introduction about components, installation/ uninstallation, user registration and auto update of the Sysmac Studio is provided. |
| License certificate | A model number, version, license number, and number of licenses are described. |
| User registration card | Two cards are contained. One is for users in Japan and the other is for users in other countries. |

Main Functions

| Category | | Function | |
|--------------|--|--|---|
| Programming | Screen | 4000 screens max. (Basic screen + popup window) | |
| | Sheet | Screen to be displayed on the basic screen or popup window. Number of sheet: 32 max. | |
| | Object | Fixed Object | Rectangle, Circle/Oval, Straight Line, Polyline, Polygon, Sector, Arc |
| | | Functional object | ON/OFF Button, Word Button, Command Button, Bit Lamp, Word Lamp, Multifunction, Label, Numeral Display & Input String Display & Input, List Selection, Thumbwheel Switch, Analog Meter, Level Meter, Broken-line Graph Bitmap, Video Display, Alarm/event Display, Date, Time, Temporary Input, Data Log Graph, Data Block Table Consecutive Line Drawing, Contents Display, Document Display (NS-Runtime only). |
| | Frame | Parts with which page can be switched independently on the screen. Page 1 to 256 can be created and switched. | |
| | Table | Object that can group multiple functional objects in one table. (1 to 30 rows x 1 to 40 columns, 256 functional objects max.) | |
| | Common Setting | Settings commonly made for functional objects. Alarm/Event setting, Data Log Setting, Broken-line Graph Group Setting, Data Block Setting, String Table Setting, Password, Unit/Scale, Dialog Setting, Symbol Table Setting | |
| | Macro | Function to execute user-defined program. | |
| Edit | Group | Groups more than one functional or fixed object to create a single object. | |
| | Order | Brings the currently selected object to the front or back. | |
| | Align/Distribute | Aligns the currently selected objects. / Distributes the currently selected objects equidistant. | |
| | Make Same Size | Aligns the size of currently selected objects. | |
| | Nudge | Moves the selected object one dot or one grid unit. | |
| | Rotate/Flip | Rotates the currently selected object. / Flips the currently selected object. | |
| | Select (All Objects/Same Type Objects) | Selects all objects on the screen. /Selects all objects of the same type as the currently selected object. | |
| | Repeat | Makes multiple copies of the selected objects. | |
| Find/Replace | Edit Properties | Displays a list of functional objects on screen to enable changing property settings. | |
| | Find | Searches for address or character string. | |
| | Replace | Replaces the specified addresses with other addresses. | |
| | Address Cross Reference | Finds locations where an address is used and lists the results. | |
| | Macro Cross Reference | Lists macro locations (functional objects and screens). | |
| View Window | Replace Host | Replaces the host for all addresses in the project. | |
| | Project Workspace | Displays screen data and settings in a tree-structured view. | |
| | Symbol Table | Displays a list of registered symbols. Find or Replace function can be used. | |
| | Property List | Displays the property of selected object. | |
| | Library | User-defined objects can be registered as a library object. | |
| | Select Object | Displays a list of objects on the screen. | |
| | Address in Use List | Displays a list of the number of times each address is used in functional objects. It is possible to jump to the selected parts. | |
| Debug | Output Window | Displays various data such as CX-Designer search, data check, and other processing results and error details. | |
| | Test Function | List of address for functional objects on the screen is displayed to change the values or monitor the values of each address. | |
| Transfer | Integrated Simulation for Entire PT-PLC System | CX-Programmer can be debugged on a personal computer together with screen data on CX-Designer, using CX-Simulator. | |
| | Quick Transfer | Only the changed data can be downloaded automatically. | |
| Print | Transfer | Uploads screen data from the NS, or downloads the selected project to the NS. | |
| | | Prints the created screen data. Output type can be selected from Printer/File/Image file. | |
| Others | Resource Report | Displays a report on the resources that have been used. | |
| | Validation | Checks all screen data in the project according to validation settings to see if any mistakes have been made. | |
| | Conversion | Changes the system version or the model of the NS-series PT of the project currently being edited. | |

System Requirements

FA Integrated Tool Package CX-One

The system requirements are the same as those for the CX-One.
For details, refer to the FA Integrated Tool Package CX-One Datasheet.

Automation Software Sysmac Studio

The system requirements are the same as those for the Sysmac Studio.
For details, refer to the Automation Software Sysmac Studio Datasheet.

Applicable Models

| Series | Model |
|--|-----------------------|
| NS-series | NS5-SQ1□(B)-V2 |
| | NS5-TQ1□(B)-V2 |
| | NS8-TV0□(B)-V2 |
| | NS10-TV0□(B)-V2 |
| | NS12-TS0□(B)-V2 |
| NSJ-series (Integrated Controller Models) | NS15-TX01□-V2 |
| | NSJ5-SQ1□(B)-M3D/-G5D |
| | NSJ5-TQ1□(B)-M3D/-G5D |
| | NSJ8-TV0□(B)-M3D/-G5D |
| | NSJ10-TV0□(B)-G5D |
| NSH-series (Hand-held Models) | NSJ12-TS0□(B)-G5D |
| | NSH5-SQ□10B-V2 |
| NS-Runtime (Machine Monitoring Software NS-Runtime) | NS-NSRCL1/3/10 |

Related Manuals

| Man.No | Model | Manual name |
|--------|----------------|---|
| W504 | SYSMAC-SE200D | Sysmac Studio Version 1 OPERATION MANUAL |
| W463 | CXONE-AL□□D-V4 | CX-One Setup Manual |
| V099 | NS-CXDC1-V3 | CX-Designer Version3.□ USER'S MANUAL |
| V082 | NS | NS-Series Ladder Monitor OPERATION MANUAL (Ladder Monitor I/O Comment Extracting Tool) |

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