CX-Designer Ver.3

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 Intmegrated 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.

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			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			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). For details, refer to the Sysmac Integrated catalog (Cat. No. P072).	– (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.
	Edit Properties		Displays a list of functional objects on screen to enable changing property settings.
Find/Replace	**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).
	Replace Host		Replaces the host for all addresses in the project.
View Window	**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.
	Output Window		Displays various data such as CX-Designer search, data check, and other processing results and error details.
Debug	**Test Function**		List of address for functional objects on the screen is displayed to change the values or monitor the values of each address.
	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.
Transfer	**Quick Transfer**		Only the changed data can be downloaded automatically.
	Transfer		Uploads screen data from the NS, or downloads the selected project to the NS.
Print			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
	NS15-TX01□-V2
NSJ-series (Integrated Controller Models)	NSJ5-SQ1□(B)-M3D/-G5D NSJ5-TQ1□(B)-M3D/-G5D
	NSJ8-TV0□(B)-M3D/-G5D
	NSJ10-TV0□(B)-G5D
	NSJ12-TS0□(B)-G5D
NSH-series (Hand-held Models)	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)

Terms and Conditions Agreement

<u>Read and understand this catalog.</u>
Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

<u>Warranties.</u>
(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
(b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE
PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.
Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.
See http://www.omron.com/global/ or contact your Omron representative for published information.

<u>Limitation on Liability; Etc.</u>
OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.
Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

<u>Suitability of Use.</u>
Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.
NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

<u>Programmable Products.</u>
Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

<u>Performance Data.</u>
Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

<u>Change in Specifications.</u>
Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

<u>Errors and Omissions.</u>
Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

2016.10

In the interest of product improvement, specifications are subject to change without notice.