

## 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:**
1. The CX-Designer is included in the CX-One FA Integrated Tool Package.
  2. NS Series is no longer available to order.



## Features

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- 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			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 Ver.4.□ includes CX-Designer Ver.3.□.	1 license *1	DVD	CXONE-AL01D-V4	–

**Note: 1.** For details, refer to the CX-One Catalog (Cat. No. R134), visit your local OMRON website.

\*1. 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.	– (Media only)	Sysmac Studio (32-bit) DVD	SYSMAC-SE200D	–
		– (Media only)	Sysmac Studio (64-bit) DVD	SYSMAC-SE200D-64	–
	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).	1 license *1	–	SYSMAC-SE201L	–

**Note: 1.** For details, refer to the Sysmac Studio Ver.1.□□ datasheet, visit your local OMRON website.

**2.** 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.

\*1. 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.	
	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
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

\* Product no longer available to order.

## 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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