

## Increase Development and Debugging Efficiency with Various Debugging Tools, Including Functions That Are Not Possible on the Actual PLC

- Application software to simulate SYSMAC CS/CJ/CP/NSJ-series CPU Unit operation on the computer to debug PLC programs without a CPU Unit.

**Note:** 1. The CX-Simulator is included in the CX-One FA Integrated Tool Package. It can not be purchased separately.  
2. NSJ-series is no longer available to order.



## Features

---

- Apply virtual external inputs to a virtual CPU Unit to debug programming.
- Execute programs by steps or with break point settings, or use any of the many other debugging functions.
- Check the cycle time during simulation.
- Debug network communications and serial communications as well.

## Ordering Information

Product name	Specifications			Model
		Number of Licenses	Media	
<b>FA Integrated Tool Package</b> <b>CX-One Ver.4.</b> □	The CX-One is a package that integrates the Support Software for OMRON PLCs and components. CX-One Ver.4.□ includes CX-Simulator.	1 license *	DVD	<b>CXONE-AL01D-V4</b>
<b>FA Integrated Tool Package</b> <b>CX-One Lite Ver.4.</b> □	CX-One Lite is a subset of the complete CX-One package that provides only the Support Software required for micro PLC applications. CX-One Lite Ver.4.□ includes CX-Simulator.	1 license	DVD	<b>CXONE-LT01D-V4</b>

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

**2.** The CX-One and CX-One Lite cannot be simultaneously installed on the same computer.

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

## Product Configuration

Setup disk : (DVD) DVD 1 piece in the case

Guidance : A4 size, English / Japanese

User license agreement / User registration card, English / Japanese

## Main Functions

Category	Function	
<b>Ladder program execution</b>	Execute continuously	
	Execute a single scan	
	Scan continuously	
	Execute a single step	
	Execute steps continuously	
	Pause the program execution	
	Stop the program	
	Repeat scan from the beginning	
	Reset	
	Execute function block program	
	Execute ST program	
	Execute SFC program	
	<b>Program debugging</b>	Set/Reset break points
Stop the program at a break point		
Set/Reset start point		
Start program from a start point		
Set/Reset I/O break conditions		
Stop the program when the I/O break conditions are satisfied		
Execute a single task		
Execute an interrupt task		
Set virtual I/O refresh time at the Unit Registration		
Set each cycle time (virtual cycle time/PC cycle time)		
<b>Monitor the status</b>	Display CPU error status	
	Display FAL/MSG messages	
	Display alarms	
	Display cycle time details	
	Display each status of the task	
<b>Set serial communications settings</b>	Display the contents of output by the serial communications commands	
	Send/Receive the serial communications commands to/from the external devices	
	Connect PT with NT Link	
<b>Set network communications settings</b>	Display the contents of output by the network communications commands	
	Sending FINS commands to and receiving FINS commands from a virtual PLC running on a computer using SEND and RECV instructions.	
	Receive the FINS commands from external PLCs and computers	
	Execute command log	
<b>Execute virtual external input</b>	Execute program in Debug UM	
	Start command log	
	Start CX-Programmer date trace file	
	Start CX-Programmer time chart monitor file	
	Set I/O conditions	
	Execute I/O conditions	
<b>Integrated simulation</b>	PLC-PT Integrated Simulation	
<b>PLC Error simulator</b>	PLC Error Simulator (CS/CJ/CP series)	
<b>Other tools</b>	<b>Data trace recording tool</b>	Execute date trace continuously
	<b>Multipoint data collection tool</b>	Collect data from the actual PLC

## System Requirements

The system requirements are the same as those for the CX-One. (The CX-Simulator is included in the CX-One.)  
For details, refer to the FA Integrated Tool Package CX-One Datasheet.

## Applicable Units

CX-Simulator can be used with SYSMAC CS/CJ/CP/NSJ-series.  
**Note:** Including models no longer available to order.

## Applicable Models

Series	Unit
CS	CS1H-CPU63/64/65/66/67 CS1G-CPU42/43/44/45 CS1H-CPU63H/64H/65H/66H/67H CS1G-CPU42H/43H/44H/45H CS1D-CPU65H/67H/67HA/68HA CS1D-CPU42S/44S/65S/67S/44SA/67SA
CJ	CJ1G-CPU44/45 CJ1H-CPU65H/66H/67H/64H-R/65H-R/66H-R/67H-R CJ1G-CPU42H/43H/44H/45H CJ1M-CPU11/12/13/21/22/23 CJ2H-CPU64-EIP/65-EIP/66-EIP/67-EIP/68-EIP CJ2H-CPU64/65/66/67/68 CJ2M-CPU11/12/13/14/15/31/32/33/34/35
CP	CP1H-XA40DR-A/XA40DT-D/XA40DT1-D/X40DR-A/X40DT-D/X40DT1-D/Y20DT-D CP1L-M60DR-A/M60DR-D/M60DT-A/M60DT-D/M60DT1-D/M40DR-A/M40DR-D/M40DT-A/M40DT-D/M40DT1-D/M30DR-A/M30DR-D/ M30DT-A/M30DT-D/M30DT1-D CP1L-EL20DR-D/EL20DT-D/EL20DT1-D CP1L-EM40DR/EM40DT-D/EM40DT1-D/EM30DR-D/EM30DT-D/EM30DT1-D CP1L-L20DR-A/L20DR-D/L20DT-A/L20DT-D/L20DT1-D/L14DR-A/L14DR-D/L14DT-A/L14DT-D/L14DT1-D/L10DR-A/L10DR-D/L10DT-A/ L10DT-D/L10DT1-D CP1E-E14SDR-A/E20SDR-A/E30SDR-A/E40SDR-A/E60SDR-A CP1E-N30S1DR-A/N30S1DT-D/N30S1DT1-D/N40S1DR-A/N40S1DT-D/N40S1DT1-D/N60S1DR-A/N60S1DT-D/N60S1DT1-D CP1E-N30SDR-A/N30SDT-D/N30SDT1-D/N40SDR-A/N40SDT-D/N40SDT1-D/N60SDR-A/N60SDT-D/N60SDT1-D CP1E-E40DR-A/E30DR-A/E20DR-A/E14DR-A/E10DR-A/E10DT-A/E10DT1-A/E10DR-D/E10DT-D/E10DT1-D CP1E-N60DR-A/N60DT-A/N60DT1-A/N60DR-D/N60DT-D/N60DT1-D/N40DR-A/N40DR-D/N40DT-A/N40DT-D/N40DT1-A/N40DT1-D/ N30DR-A/N30DR-D/N30DT-A/N30DT-D/N30DT1-A/N30DT1-D/N20DR-A/N20DR-D/N20DT-A/N20DT-D/N20DT1-A/N20DT1-D/ N14DR-A/N14DT-A/N14DT1-A/N14DR-D/N14DT-D/N14DT1-D CP1E-NA20DR-A/NA20DT-D/NA20DT1-D CP2E-E14DR-A/E20DR-A/E30DR-A/E40DR-A/E60DR-A CP2E-S30DR-A/S40DR-A/S60DR-A/S30DT-D/S40DT-D/S60DT-D/S30DT1-D/S40DT1-D/S60DT1-D CP2E-N14DR-A/N20DR-A/N30DR-A/N40DR-A/N60DR-A/N14DR-D/N20DR-D/N30DR-D/N40DR-D/N60DR-D/N14DT-A/N20DT-A/ N30DT-A/N40DT-A/N60DT-A/N14DT-D/N20DT-D/N30DT-D/N40DT-D/N60DT-D/N14DT1-D/N20DT1-D/N30DT1-D/N40DT1-D/ N60DT1-D
NSJ	NSJ5-□-G5D NSJ8-□-G5D NSJ10-□-G5D NSJ12-□-G5D NSJ5-□-M3D NSJ8-□-M3D

**Note:** Including models no longer available to order.

## Related Manuals

Cat.No.	Model	Manuals name	Contents
W366	CXONE-AL□□D-V4	CX-Simulator Operation Manual	Describes the operating procedures for the CX-Simulator. Also refer to the following manuals when simulating operation: CX- Programmer Operation Manual (W446), CS Series Operation Manuals and CJ Series Operation Manual (CS Series: W339, CJ Series: W393), and CS/CJ Series Instructions Reference Manual (W340).
W469	CXONE-AL□□D-V4	CX-One Setup Manual	Installation and Overview of CX-One FA Integrated Tool Package

## Terms and Conditions Agreement

### Read and understand this catalog.

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

### Warranties.

(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.

### Limitation on Liability: Etc.

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.

### Suitability of Use.

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.

### Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

### Performance Data.

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.

### Change in Specifications.

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.

### Errors and Omissions.

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.